HARIYO BAN PROGRAM

Quarterly Performance Report

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LIST OF ABBREVIATIONS AND ACRONYMS

ACA Annapurna Conservation Area

ACAP Annapurna Conservation Area Project
AEPC Alternative Energy Promotion Centre

AWP Annual Work Plan

BAFER Balchaur Forest and Environment Resource Development Centre, Nepal

BaNP Banke National Park

BCC Biodiversity Conservation Center

BCT Bahun, Chhetri, Thakuri BNP Bardia National Park

BZ Buffer Zone

BZCF Buffer Zone Community Forest

BZCFUGs Buffer Zone Community Forest User Groups

BZMC Buffer Zone Management Council

BZUC Buffer Zone User Committee

CA Conservation Area

CAMC Conservation Area Management Committee

CAPA Community Adaptation Plan of Action

CARE Cooperative for Assistance and Relief Everywhere

CB Community Based

CBAPU Community Based Anti-Poaching Unit

CBO Community Based Organization

CC Climate Change

CCA Climate Change Adaptation
CCN Climate Change Network

CF Community Forest

CFCC Community Forest Coordination Committee

CFD Community Forestry Development
CFOP Community Forest Operational Plan
CFUG Community Forest User Group
CHAL Chitwan Annapurna Landscape

CIN Conservation Information Network

CLAC Community Learning and Action Center
CLCC Cluster Level Coordination Committee

CNP Chitwan National Park

CO₂ Carbon Dioxide
CS Civil Society

CSO Civil Society Organization

CTEVT Council for Technical Education and Vocational Training

CUG Community Users Group

DANAR Dalit Alliance for Natural Resources
DDC District Development Committee

DFO District Forest Office

DFRS Department of Forest Research and Survey

DNPWC Department of National Parks and Wildlife Conservation

DoF Department of Forests

DSCO District Soil Conservation Office

EFN Education for Nature

EMMP Environmental Mitigation and Monitoring Plan

ER-PIN Emission Reduction Project Idea Note FCPF Forest Carbon Partnership Facility

FECOFUN Federation of Community Forestry Users in Nepal

FEMMP Framework Environmental Mitigation and Monitoring Plan

FM Frequency Modulation

FNCCI Federation of Nepali Chambers of Commerce and Industry

FOP Forestry Operational Plan

FPIC Free Prior and Informed Consent
FRA Forest Resource Assessment
GESI Gender and Social Inclusion

GHG Greenhouse Gas

GLA Government Line Agency
GoN Government of Nepal
GPS Global Positioning System

H4L Health for Life

HIMAWANTI Himalayan Grassroots Women's Network Nepal

HWC Human Wildlife Conflict

I/NGO International/ Non-Government Organization

IAPS Invasive Alien Plant Species

ICCA Initiative for Climate Change Adaptation

ICIMOD International Centre for Integrated Mountain Development

ICS Improved Cooking Stove

ICVCA Integrated Climate Vulnerability and Capacity Assessment

ID Identity

iDE International Development Enterprises

IEC Information Education and Communication

IGA Income Generating Activity

InVEST Integrated Valuation of Environmental Services and Tradeoffs Tool

IoF Institute of Forestry IR Intermediate Result

IUCN International Union for Conservation of Nature

KISAN Knowledge-based Integrated Sustainable Agriculture and Nutrition

LAPA Local Adaptation Plan of Action

LDRMP Local Disaster Risk Management Planning Guideline

LIP Livelihood Improvement Plan

LRP Local Resource Person

M&E Monitoring and Evaluation

MCA Manaslu Conservation Area

MCAP Manaslu Conservation Area Project

MFA Ministry of Foreign Affairs

MoFSC Ministry of Forests and Soil Conservation

MoLRM Ministry of Land Reform and Management

MoSTE Ministry of Science, Technology and Environment

MRV Monitoring, Reporting and Verification
MSFP Multi Stakeholder Forestry Project

MT Metric Ton

NAP National Adaptation Plan NatCap Natural Capital Project

NBS National Biodiversity Strategy

NCCSP Nepal Climate Change Support ProgramNDC Negative Determination with ConditionNEFEJ Nepal Forum of Environmental Journalists

NGO Non-Government Organization

NP National Park

NRM Natural resource management

NRUSEC Nepal Rural Self-Reliance Campaign

NTFP Non Timber Forest Products

NTNC National Trust for Nature Conservation

PDD Project Design Document

PES Payment for Ecosystem Services

PGA Participatory Governance Assessment
PHPA Public Hearing and Public Auditing
PIPAL People in Participatory Action for Life
PMC Program Management Committee

PMERL Participatory Monitoring, Evaluation, Reflection and Learning

PMU Program Management Unit PSC Program Steering Committee PWBR Participatory Well-Being Ranking
QPR Quarterly Performance Report

REDD+ Reducing Emissions from Deforestation and Forest Degradation Plus

REL Reference Emission Level

RIMS Resource Identification and Management Society

RIS Ramsar Information Sheet

SASK Trade Union Solidarity Centre of Finland

SENSE School Ecological Conservation Education Network

SRI System of Rice Intensification SWR Suklaphanta Wildlife Reserve

TAL Terai Arc Landscape

TNA Training Needs Assessment

ToR Terms of Reference
ToT Training of Trainers

UCPVA Underlying Causes of Poverty and Vulnerability Analysis

UK United Kingdom

UNFCCC United Nations Framework Convention on Climate Change

USAID United States Agency for International Development

USG United States Government VA Vulnerability Assessment

VDC Village Development Committee

WOCAN Women Organizing for Change in Agriculture and Natural Resource Management

WOO Windows of Opportunity

WR Wildlife Reserve WWF World Wildlife Fund

1. EXECUTIVE SUMMARY

This quarterly performance report of the Hariyo Ban Program covers the period April-June 2013. During this time the program focused on intensive implementation of field activities, working with 25 districts, 237 Village Development Committees (VDCs) and 14 Municipalities as work was expanded in the Terai Arc Landscape (TAL) and Chitwan Annapurna Landscape (CHAL).

During this reporting period, Hariyo Ban reached a total of 162,855 people including 83,679 women (51.38%), 44,534 Dalit (27.35%), 58,728 Janajatis (36.06%), 57,548 Brahmin/Chhetri/Thakuri (35.34%), 1,190 Madhesi (0.73%), 19,594 poor (12.03%) and 13,372 youth (8.21%).

The political environment remained largely calm during the reporting period, apart from a few strikes which held up some activities temporarily. The election of the Constituent Assembly has been proposed for November 19, 2013, and the Election Commission has started registration of political parties and voters. The political situation is still fluid, but the main political parties are now focusing on the election. Hopefully this election will provide the opportunity to prepare a new constitution for the nation. Gender based violence is increasing and impunity is still widespread.

Due to favorable rainfall during this period there was a reduction in electricity outages, which benefitted people in certain project areas and made work easier for consortium partners and the core team. At the same time, many community people started rice plantation activities early, capitalizing on the early monsoon, which affected implementation of some field level activities.

After completing preparatory activities in the second quarter, Hariyo Ban intensified activity implementation in the field during this reporting period, which will continue in the fourth quarter. A wide range of activities was implemented under the three thematic components, cross-cutting themes and monitoring and evaluation (M&E). Under Biodiversity Conservation, activities conducted included focal species monitoring; biophysical assessment of critical sub-watersheds; mobilization of local resource persons (LRPs); installation of electric fencing for human-wildlife conflict mitigation; training citizen scientists; livelihood improvement plan preparation; corridor restoration; community based anti-poaching unit (CBAPU) formation and mobilization; governance related activities such as public hearing and public auditing; participatory well-being ranking; and green enterprise development.

The Sustainable Landscapes component activities included: reducing emissions from deforestation and forest degradation plus (REDD+) sensitization workshops at the community level; training on payment for ecosystem services (PES) and REDD+, and orientation on sustainable forest management; community consultation on the forest carbon benefit sharing mechanism; community forest operational plan (CFOP) renewal; consultation on the benefit distribution mechanism through REDD+; media mobilization; and exposure visits and activities to address the drivers of deforestation and forest degradation, including biogas installation, forest fire management training, awareness workshops on forest fire fighting, and improved cooking stove training.

The Climate Change Adaptation component activities included awareness raising, sensitization and training on climate change issues for Government of Nepal (GoN), consortium partners, civil society organizations (CSOs), communities, school students and media. The Hariyo Ban Program conducted integrated climate vulnerability and capacity assessments (ICVCAs), participatory monitoring, evaluation, reflection and learning (PMERL), training of trainers (ToT) for LRPs, VDC level vulnerability assessment and planning, community learning and action center (CLAC) TOT, preparation and implementation of community adaptation plans of action (CAPA), and exposure visits.

Various activities were conducted under the three cross-cutting themes of the Hariyo Ban Program viz. gender and social inclusion (GESI), governance and livelihoods across all three thematic components. We worked to mainstream GESI across different levels within and beyond Hariyo Ban Program and contributed to policy processes. Governance activities included strengthening governance in Natural resource management (NRM) groups through governance capacity building and promoting sound governance practices in the NRM groups. Livelihoods activities included supporting poor households in Community Forest User Groups (CFUGs) to improve their livelihoods, establish green enterprises, and leverage resources.

Landscape level planning meetings were concluding during this reporting period. Monitoring and evaluation activities included a joint monitoring visit of the Hariyo Ban consortium partners and GoN; M&E orientation for consortium partner staff, non-government organization (NGO), community based organization (CBO) and grantees; progress reporting; and regular field monitoring. The Communications Unit continued to produce monthly newsletters; organized workshops and field visits for media people; and produced weekly highlights.

2. INTRODUCTION

The Hariyo Ban Program began operating in Nepal in August 2011 and will run for a period of five years. Funded by United States Agency for International Development (USAID), the Program is being implemented by four core partners: World Wildlife Fund (WWF) Nepal (prime recipient), Cooperative for Assistance and Relief Everywhere (CARE), National Trust for Nature Conservation (NTNC), and the Federation of Community Forestry Users in Nepal (FECOFUN). The Hariyo Ban Program works on three core, interwoven components: biodiversity conservation, sustainable landscapes, and climate change adaptation, with livelihoods, governance, and gender and social inclusion being important cross-cutting themes. This quarterly performance report (QPR) covers the period from April to June 2013.

The overall goal of the Hariyo Ban Program is *to reduce adverse impacts of climate change and threats to biodiversity in Nepal.* The Program works through site-based interventions in two priority landscapes with high biodiversity value, namely the Terai Arc Landscape (TAL) and Chitwan Annapurna Landscape (CHAL). This work is complemented by supporting an enabling policy environment at the national level.

The three objectives of the Hariyo Ban Program are:

- Reduce threats to biodiversity in targeted landscapes;
- Build the structures, capacity and operations necessary for effective sustainable landscape management, with a focus on reducing emissions from deforestation and forest degradation (REDD+) readiness;
- Increase the ability of targeted human and ecological communities to adapt to the adverse impacts of climate change.

3. OVERVIEW OF BENEFICIARIES AND STAKEHOLDERS

The Hariyo Ban Program engaged and worked with the following target beneficiaries and stakeholders during this quarter:

Community Level

- Poor, vulnerable and socially excluded men and women associated with community learning and action centers (CLACs)
- Poor and marginalized users identified through participatory well-being ranking (PWBR)
- Executive committees and general members of natural resource management (NRM) groups, including community forest user groups (CFUGs), buffer zone community forest user groups (BZCFUGs), buffer zone user committees (BZUCs), conservation area management committees (CAMCs), and community forest coordination committees (CFCCs)
- Executives and members of cooperatives
- Community based anti-poaching unit (CBAPU) members
- Local resource persons (LRPs)
- Members of community adaptation plans of action (CAPA) groups

Nepalese civil society, academia, research centers and private sector organizations

- FECOFUN district chapters
- Institute of Forestry
- Hotel Association Nepal
- Local NGOs
- Cooperatives
- Biogas service providers

Government of Nepal

- Ministry of Forests and Soil Conservation
- Ministry of Science, Technology and Environment
- Department of Forests
- Department of National Parks and Wildlife Conservation
- Department of Soil Conservation and Watershed Management
- Department of Plant Resources
- Department of Forest Survey and Research
- District Forest Offices
- District Soil Conservation Offices
- National Parks and Wildlife Reserves

National Programs

- Multi Stakeholder Forestry Project (MSFP)
- Initiative for Climate Change Adaptation (ICCA)
- Forest Resource Assessment (FRA)
- Nepal Climate Change Support Program (NCCSP)
- Other USAID funded projects

4. WORKING AREAS

In the Terai Arc Landscape (TAL), the Hariyo Ban Program focuses implementation in the Brahmadev, Karnali, Barandabhar, and Kamdi corridors, as well as the Nijgadh and Chandranigahapur bottlenecks of the Parsa Bagmati corridor. These corridors and bottlenecks include parts of twelve districts (Banke, Bara, Bardiya, Chitwan, Dang, Kailali, Kanchanpur, Makawanpur, Nawalparasi, Parsa, Rautahat and Surkhet), 116 VDCs, and 7 municipalities. In the Chitwan-Annapurna Landscape (CHAL), the Program was implemented in the Seti, Marsyangdi and Daraudi river basins, Annapurna Conservation Area, and Manaslu Conservation Area. Besides Hariyo Ban Program provides support to various national parks and wildlife reserves. These areas cover part of thirteen districts (Dhading, Gorkha, Gulmi, Kaski, Lamjung, Manang, Mustang, Palpa, Parbat, Syangja, Tanahun, Nuwakot and Rasuwa), 121 VDCs, and 7 municipalities. Support was also extended to improve the management of core areas of Chitwan National Park (NP), Bardia NP, Parsa Wildlife Reserve (WR) and Shuklaphanta WR in the TAL area. In addition, support was provided to capacitate local youth in the buffer zone of Langtang National Park in red panda monitoring. During this quarter, Hariyo Ban worked in a total of 25 districts, 237 VDCs, and 14 municipalities in TAL and CHAL.

A list of the VDCs and other details are given in **Annex 1**.

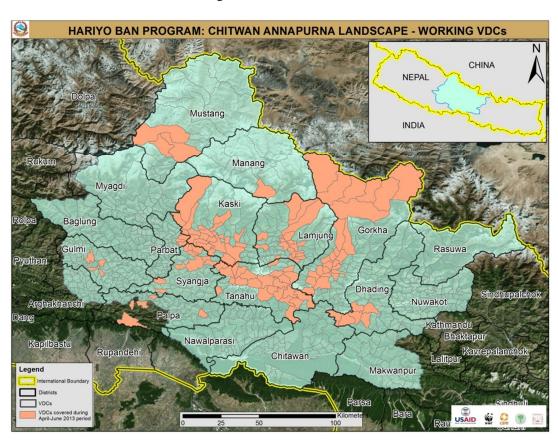


Figure 1 Hariyo Ban Program Working areas - CHAL

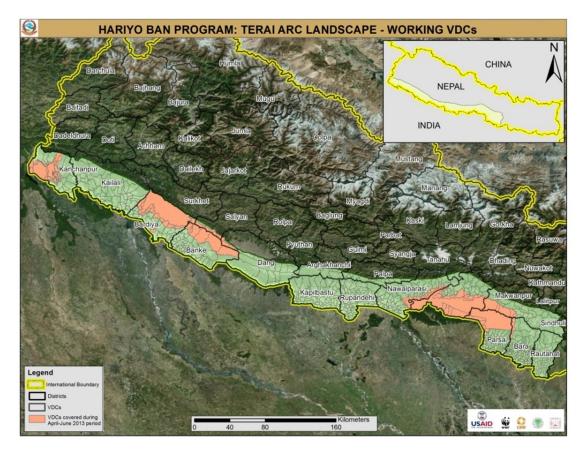


Figure 2 Hariyo Ban Program Working areas - TAL

5. MAJOR HIGHLIGHTS OF THE REPORTING PERIOD

5.1 Administrative and Operations Activities

5.1.1 Hariyo Ban Program Committees

- i) Program Steering Committee (PSC): No PSC meeting was held during the reporting period.
- **ii) PSC-Working Group:** A meeting of the PSC working group was held on 16th May which discussed development and printing of guidelines; support for GoN vehicle maintenance; inputs on various study reports; update on equipment support; and assessment of Ministry of Forests and Soil Conservation (MoFSC) GESI Strategy implementation status. The working group has been instrumental in providing support to the PSC for making more informed decisions.
- **iii) Program Management Committee (PMC):** A special meeting of the PMC was held during this reporting period to discuss the strategy for the third year work plan.
- **iv) Program Management Unit (PMU):** Regular weekly meetings of the Hariyo Ban Program core team have been held to address day-to-day issues and priorities.
- **iv**) **Landscape Level Coordination Committees:** Two landscape level coordination committee meetings were held on 11 June and 14 June in TAL and CHAL respectively, in conjunction with landscape level planning workshops for the third year. In TAL, the committee discussed the distribution of Community Forestry Development Guidelines for effective orientation programs

in CFUGs; landscape level joint monitoring; developing a working mechanism with CFCCs; and addressing GESI issues in program implementation. In CHAL, the committee discussed plans for satellite districts; CHAL composite plan preparation; information sharing among consortium partners; and consistency in Community Adaptation Plan of Action (CAPA)/Local adaptation plan of action (LAPA) preparation. The discussions brought clarity to various topics, and should enable more efficient implementation of the Program going forward.

5.2 Progress on Annual Work Plans

The following progress was made in the third quarter on implementation of the work plan.

Biodiversity Conservation

IR 1: Biodiversity Conserved

Objective: To reduce threats to biodiversity in target landscapes

IR- Biodiversity conserved: Indicators- 1.1 ha of bio-diverse area (forest, wetlands, grasslands) under improved management; 1.2 Populations of focal species increased 1.2.2 Number of people receiving training in NRM and/or biodiversity conservation; USAID standard Indicator 4.8.1-26 Number of hectares of biological significance and/or natural resources under improved natural resource management as a result of United States Government (USG) assistance; Indicator 4.8.1-6 Number of people with increased economic benefits derived from sustainable natural resource management and conservation as a result of USG assistance; 4.8.1-29 Number of person hours of training in natural resources management and/or biodiversity conservation supported by USG assistance

The Hariyo Ban Program has adopted a threats-based approach to biodiversity conservation. The threat assessments at the landscape, corridor, and basin/sub-watershed level have been an important part of refining Hariyo Ban's strategy for biodiversity conservation, and the program has devised appropriate interventions to address priority threats to species and landscapes.

During the reporting period, the watershed and site level threats assessments were completed in the Daraudi, Marsyangdi and Seti river basins. The results of the site level assessments of threats to biodiversity, drivers of deforestation and climate vulnerabilities are provided in **Annex-2**. Other activities under the Biodiversity Component included: focal species monitoring; biophysical assessment of critical sub-watersheds; mobilization of LRPs; installation of electric fencing for human wildlife conflict mitigation; training citizen scientists; livelihood improvement plan preparation; corridor restoration; CBAPU formation and mobilization; governance related activities such as public hearing and public auditing; participatory well-being ranking; and green enterprise development.

A total of 41,880 people, including 21,394 women (51.08%), 4,869 Dalit (11.63%), 20,217 Janajatis (48.27%), 16,495 Brahmin/ Chhetri /Thakuri (39.39%), 151 Madhesi (0.36%), and 148 others (0.35%) participated in various trainings, workshops, campaigns, and governance assessments under this component.

The summary of progress against the quarterly plan is provided in Table 1.

Table 1: Summary of progress in Biodiversity Conservation

IR	Activities	Target	Year II Q1 Q2 Q3 Q4	Status	Achievements	Remarks							
1.	Biodiversity Conse	rvation											
1.1	Threat to focal spe	cies reduced											
1.1.1	Research and monitoring												
	Ecological research on grey wolf/musk deer	2 species		On track	Methodology for grey wolf study has been developed; research is being initiated in Surkhang, Chhosher, Chhonup and Ghami of Annapurna Conservation Area (ACA) and Samagaon, Lho, and Chhekampar in Manaslu Conservation Area (MCA). Methodology for musk deer study developed; study is being initiated in MCA in Bihi, Prok, Lho, Samagaon, Chumchet and Chhekampar VDCs. First phase of the study will be completed by the end of August.								
	Regular monitoring of focal species and birds in corridors	4 species		On track	Bird survey in Khata – Karnali Corridors is being carried out in two seasons (one in winter and another in summer).	The detailed report indicating the status of birds in the corridor will be developed by the end of August.							
	Feasibility study for re-introduction of rhino, swamp deer and wild water buffalo	3 species		On track	Feasibility study for reintroduction of wild water buffalo and swamp deer in Chitwan, and rhinoceros in Bardia's Babai valley, have been completed by a team of biologists	The draft report has been prepared and shared internally for review.							

IR	Activities	Target		ar II	Status	Achievements	Remarks
			Q1 Q2	Q3 Q	4	and technicians from Department of National Parks & Wildlife Conservation (DNPWC), Department of Forests (DoF), NTNC, WWF Nepal, and Hariyo Ban team.	
	Red panda and dolphin monitoring	2 species			On track	Red panda monitoring training was organized to train 10 local youths in Langtang. Dolphin monitoring training was organized in Bardia for 17 youths and park staff, and a pre-monsoon survey was completed in Karnali. This was followed by a premonsoon survey in Karnali, where a minimum of four dolphins were observed in the western branch of a 19 km stretch.	Community will regularly monitor and provide information on red panda. Dolphin monitoring in Narayani & Rapti was carried out along with gharial monitoring. No dolphins were observed in these two river systems.
	Rhino Identity (ID) and prey base monitoring	1 species/5 corridors			On track	Rhino ID is on-going in Sauraha block	ID based monitoring of rhinoceros in Sauraha will continue. NTNC has expanded this to Barandabhar corridor area, Pyaridhap, Lamichaur, Dibyapuri, and Meghauli areas. Information on prey base in corridor areas has been collected during the national tiger survey, and the report is expected by the end of this fiscal year.

TD	A -4::4:	T4		Yea	r II		C4-4	A -1.5	Dl
IR	Activities	Target	Q1	Q2	Q3	Q4	Status	Achievements	Remarks
	Climate change impact on species and their habitats	4 sites					On track	Detailed methodology for long term impact monitoring of climate change on biodiversity and local communities has been finalized. Draft report on impact of climate change on habitats has been prepared and shared for review.	As reported earlier, four sites (Barandabhar area in Siwalik region, Panchase in Mid hills, Lete/Ghasa area in the high mountains, and northwest of Kagbeni area) have been finalized to set up the grid. Setting up the grid was delayed, but will be set in Barandabhar area in early August. The team is currently working to design the long term monitoring mechanism.
1.1.2	Species conservation	n and re-intro	oduct	ion					
	Blackbuck/ gharial/ vulture/ghoral	4 species					On track	Translocation of blackbuck from the captive population is complete, vulture study completed, grant to local community for goral conservation granted. Support has also been provided to vulture conservation initiatives in Nawalparasi and Dang.	NTNC is working with government to translocate additional blackbucks from the wild population in Khairapur. This activity will be done as soon as management plan for this sub population is prepared, most probably early next fiscal year.
	Management of new blackbuck population	1 site					On track	Behavior monitored, habitat management continued	This activity will be continued throughout the year, as planned.
	Important flora (Bijaya sal/Chanp, Okhar, Kaulo) conservation	3 species					On track	In-situ conservation of these species and propagation through nursery development is ongoing.	

ID	A -4::4:	Т4		Yea	r II		Status	Achievements	Remarks				
IR	Activities	Target	Q1	Q2	Q3	Q4		Acmevements	Kemarks				
NTNC Cost share	Blackbuck population monitoring						On track		This activity will continue in the fourth quarter.				
WWF cost share							Completed	A wild population survey was conducted in all major river systems with gharial. The results confirmed 124 gharials in Nepal with 45, 63, 14 and 2 gharials in Rapti, Narayani, Babai and Karnali rivers respectively. River Rangers Program continued in Rapti and Narayani rivers. Two patrols conducted every month. Exsitu facilities upgraded in Bardia and Chitwan NP.					
1.1.3	Build capacity to reduce threat to focal species												
	Formation of CBAPUs	25 CBAPUs					Completed	A total of 64 CBAPUs have been formed and mobilized (WWF TAL - 41; WWF CHAL - 7, CARE 1; and NTNC- 15).	Program exceeded CBAPU formation target. Activities of newly formed CBAPUs will constantly be followed and assisted wherever necessary.				
	Capacity building/ mobilization of Community-Based Anti-Poaching Units (CBAPUs)	74 CBAPUs					On track	Ten trainings completed.	This will continue in the fourth quarter.				
	Capacity building on wildlife monitoring	12 people					On track	Draft training material has been outlined.	NTNC has decided to organize this training in the middle of the fourth quarter.				

IR	Activities	Target	Year I Q1 Q2 Q3	 Status	Achievements	Remarks
	Support CBAPU network	1 network		Completed	The network annual program was organized in Bardia's Khata corridor area in a gathering of around 6000-8000 local people.	
	Government Line Agency (GLA) institutional capacity building	12 institutions		On track	Institutional capacity building support to Kailali, Bardia district forest offices, Mid-western regional training center and Bardia NP has already been provided, and agreement with Banke, Chitwan, Bara, Parsa and Rautahat district forest offices has been signed.	This activity will continue in fourth quarter
	Train and establish Citizen Scientists (eco-clubs)	1,825 persons		On track	Thirty citizen scientists, including 16 female members, have been trained in CHAL. Similarly, a total of 4 eco-clubs consisting of 1,278 students (710 boys and 568 girls) mobilized in conservation activities. Training was also organized for 216 eco-club members (153 boys and 63 girls) from nearby schools in Karnali River Corridor.	Over 1,500 people have been trained as of the 3 rd quarter. This training effort will continue in fourth quarter and beyond.

IR	Activities	Target	Year II Q1 Q2 Q3 Q	Status	Achievements	Remarks
1.1.4	Management of H	ıman-wildlife (Conflict (HW	C)		
	Relief and rescue fund establishment	3 sites		Cancelled		After the suggestion from PSC-Working Group focal person, this activity has been cancelled. The resources allocated for this activity will be used in mobilizing citizen scientists.
	HWC mitigation	20 km		On track	15 km solar power fence has been established to minimize HWC in Bhimapur VDC of Bardia along the Nepal-India border	Building of power fence began before the 3 rd quarter to mitigate severe HWC in the Bhimapur, and this activity will continue into the fourth quarter as needed.
	Human-common leopard conflict mapping	1 study		On track	Draft Terms of Reference (ToR) prepared during the 2 nd quarter has been reviewed and finalized. This study will be started early in the fourth quarter.	The draft report of this study is expected by end of September this year.
1.1.5	Transboundary co	operation				
	Transboundary meetings	5 meetings		On track	One community level transboundary meeting occurred in Parsa.	Representation of government staff members has been delayed due to lengthy official procedures. Transboundary meetings at local level will continue throughout fourth quarter.
WWF Cost share	Support DNPWC to strengthen transboundary cooperation			On track	Central level transboundary meetings with India and China have been carried out.	

IR	Activities	Target		ır II Q3 Q4	Status	Achievements	Remarks						
1.2	Threats to targeted landscape reduced												
1.2.1	Under take habitat restoration and management												
	GIS based database and range post level profile	8 range posts			On track	ToR has been developed.	Range post level profiling will be initiated early in the fourth quarter.						
	Habitat (grassland) management	365 ha			On track	A total of 100 ha of grassland has been managed.	Ground work completed and grant has been extended.						
	Habitat restoration in corridors and bottlenecks	100 ha			On track	Grant agreement signed with Kamdi CFCC and Chitwan District Forest Office (DFO) for grassland management.							
	Support for World Peace Botanical Garden	1			On track	Inauguration of garden was held on 15 February 2013. Office set up completed.	All field survey and information collection has been completed and write up of management plan has been started. As reported by the Department of Plant Resources, the final report preparation is a little delayed. The final plan is expected to come in the fourth quarter.						
	Land use mapping	2 PAs			On track	ToR prepared, reviewed and shared with DNPWC.	This activity is expected to be accomplished by the end of year 2.						
	Promotion of biogas to reduce pressure in forest	200 plants			On track	136 biogas plants have been installed.							

IR	Activities	Target	Yea Q1 Q2		Status	Achievements	Remarks
	Livestock grazing pressure management	6 sites			On track	Grants to communities awarded	Grant to Patabhar BZUC of Bardia National Park (BNP), Deurali Hariyali BZUC of Banke National Park (BaNP) and Suklaphanta BZUC of Suklaphanta Wildlife Reserve (SWR) awarded. Also, grants have been awarded to promote stall feeding practices in Kailali.
	Water supply mechanism for wildlife	1 system			On track		This activity has been changed to supply surface water. This decision was made based on the feasibility study report that clearly indicated "not-feasible due to the nature of the ground". The proposed site in Parsa WR is a foothill of Churia and Churia is composed of boulders, gravel, sand and conglomerates where the water table is very low. Surface water will be brought from Mahadev Khola using polythene pipes.
1.2.2	Wetland managem	ent and invasi	ve specie	s contro	ol .		
	Mechanism for biological control of water hyacinth	1 study			On track		Research is ongoing.

IR	Activities	Target	Year Q1 Q2		Status	Achievements	Remarks
	Community engagement to manage Invasive Alien Plant Species (IAPS) in forest ecosystems	100 ha			Completed	Over 4,000 people mobilized to remove IAPS from 114 ha of forest of critical corridors (Karnali, Kamdi and Brahmadev) and buffer zone community forests.	
	Community engagement to manage IAPS in one critical wetland	1 wetland			On track	Grant to community awarded	The program will be implemented as per the plan prepared by a team representing Hariyo Ban, TAL and the WWF central office.
	Updating of Ramsar Information Sheet (RIS) for Beesh Hazar and Jagadishpur	2 RIS			On track	ToR finalized	Execution of this activity will be initiated early in the fourth quarter.
	Wetland restoration and management	6 wetlands			On track	One waterhole managed in Kailali, Janakalyan CFUG.	Support has been provided to restore Butaha wetland (5 ha) in Namuna Buffer Zone Community Forest (BZCF).
1.2.3	Critical sub-waters	shed managen	nent	,			
	Assessment of biophysical/socio-economic condition and preparation of subwatershed plans	Preparation of 4 assessments and plans			On track	Study team selected and assessment work initiated.	

IR	Activities	Target		Year		Status	Achievements	Remarks					
	Activities	Target	Q1	Q2	Q3 Q4	ļ Status	Achievements	Kemarks					
	Support	4 plans				Delayed		This activity will be implemented					
	communities							after the preparation of sub-					
	(including women)							watershed management plans.					
	to implement sub-							Plan preparation is ongoing.					
	watershed												
	management plans												
1.3	Internal governance	e of communi	ty gr	oups	respo	nsible for ecosyste	m management strengthened						
1.3.1	Build capacity& promote nat. resource governance												
	Capacitate and	>100 people				On track	46 LRPs including 27 women, 31	This activity will also continue in					
	mobilize LRPs						Bahun, Chhetri, Thakuri (BCT), 5	fourth quarter.					
							Dalit, 8 Janajati, 1 other were traine	4					
							and mobilized in 288 activities						
							during this reporting period.						
	Train NRM groups	51 trainings				On track	A total of 875 people including 46	More events are planned for next					
	including CAMCs						LRPs trained from 30 training	quarter.					
	in governance,						events organized in this quarter						
	biodiversity												
	conservation and												
	GESI												
	Support NRM	30 groups				Completed	Supported 42 NRM groups	Although the targets are achieved,					
	groups in						including CFCCs, BZUCs and	similar activities will also					
	conservation						CFUGs to undertake conservation	continue in fourth quarter.					
	activities						activities such as plantations and						
							restoration of degraded forests,						
							conservation awareness,						
							management of grasslands and						
							forest habitat, controlling invasive						
							species etc.						

ID	Activities	TD 4	Year II			G		. .
IR		Target	Q1 Q2	2 Q3	Q4	Status	Achievements	Remarks
	Support governance strengthening and promotion activities Participatory governance assessment (PGA), PWBR, Public hearing and public auditing (PHPA), livelihood improvement, equitable benefit sharing, GESI etc.)	210 events				On track	Briefing papers on governance tools were prepared. CLACs and other CFUGs were also mobilized for using these governance tools like 13 PHPA in CFUGs of 5 districts and 44 PWBR workshops in 11 districts.	Assessment report on practice of governance tools will be shared in next quarter.
	GESI issue assessment in NRM groups	1 no.				On track	Consultants are analyzing data collected from the field to prepare the report. Kine Mitchell conducted a short internship study.	The consultant and intern will complete the assessment reports in the fourth quarter.
	GESI TOT for staff, LRPs and Civil society(CS)	2 events				On track	One event conducted in TAL in 3 rd quarter, while another event is planned for next quarter in CHAL.	
	Community Forestry Development (CFD) Guidelines, CFUG Forestry Operational Plan (FOPs), Constitution, Forest Law and By-laws orientation, account/record keeping					On track	55 orientations were organized (38 in TAL and 17 in CHAL) attended by 1,972 local people. 17 coaching events on accounts/record keeping organized, benefiting 481 people.	The orientation program will continue in the fourth quarter

ID	Activities	Target	Year II			G4.4	A -1.5	n 1
IR			Q1 Q2	Q3	Q4	Status	Achievements	Remarks
	Consolidation of landscape level issues on NRM governance (comparative analysis of PGA)	1				On track	The study has been merged with governance best practices study. TOR has been finalized and process of selecting consultants has been initiated.	
	ToT on leadership (women leaders /power agents) for NRM/biodiversity conservation)	2 events				Completed	This was merged with leadership training events at the local level and was held in 2nd quarter.	More position oriented, systematic leadership development package will be planned in the third year.
	Leadership capacity (local women leaders /power agents for NRM/biodiversity conservation) development	14 no.				On track	A total of 13 events were organized and attended by 386 people, including 350 women, 179 Janajatis and 41 Dalits.	Remaining activities will be completed in the next quarter.
1.3.2	Awareness building	g programs						
	Awareness on biodiversity conservation, climate change issues through audio-visual, eco- clubs, mass campaigns and printed materials	130				On track	63 awareness workshops on biodiversity conservation and climate change issues completed.	Will be continued in the next quarter
	Documentation and sharing of success stories	1 no.				On track	TOR has been finalized and process of selecting consultant has been initiated.	Will be continued in the next quarter.

IR	Activities	Target	Year II Q1 Q2 Q3 Q	Status	Achievements	Remarks
1.3.3	Community Learn	ing and Action	n Center			
	Learning documentation, assess/profile development	1 no.		On track	Draft TOR for CLAC assessment has been completed.	The activity will be continued in the next quarter.
1.4	Income from susta	inable sources	of livelihoods f	or forest dependent o	ommunities increased	
1.4.1	Review feasibility	of wildlife prei	nium scheme			
	Study biodiversity conservation incentives	1 no.		On track	Draft ToR has been prepared and shared for review	Study to be initiated in fourth quarter.
1.4.2	Support communit	y groups for l	ivelihood impro	vement		
	Green enterprise development support	10 no.		On track	1 enterprise supported for sisnu (nettle) powder production.	Hariyo Ban selected CFUG recipients and granted NRs 216,000, with CFUG contributing Rs. 40,000. Good progress has been made and Hariyo Ban will continue to support.
	Promotion of community managed tourism	5 no.		On track	Study to identify potential sites to promote community based ecotourism has been completed. The study has proposed four potential sites: Madi & Sukla-Ghodaghodi complex in TAL, Syange and Panchase in CHAL.	After consultation with local government and other stakeholders, the previously planned program support to initiate eco-tourism in Resunga has been dropped.
	Livelihoods improvement plans (LIP) preparation and support	224 no.		On track	201 LIPs prepared during the quarter	LIP preparation is ongoing and will be continued in the fourth quarter.

IR	Activities	Target	Year II		Status	Achievements	Remarks
IK	Activities		Q1 Q2	Q3 Q	4 Status	Achievements	Kemarks
	Micro-credit and income generating activities (IGAs)	23 no.			On track	Numerous groups have initiated the process of registration as cooperatives.	Details will be reported in the next quarter.
	Skill based training and livelihood support (Sonaha, Majhi, Chepang, Bote)	393 persons			On track	9 skill based trainings organized in CHAL and TAL for 56 people, including 17 female, 45 Janajatis.	This activity will continue in the fourth quarter.
	Livelihood support for CBAPUs	2 CBAPUs			On track	40 CBAPU members, including 5 women (all Janajati of Patabhar BZUC, Geruwa BZCU and Suryapatuwa BZUC), provided training on motorcycle maintenance, mobile repairs and basic computer skills	
	Livelihood support in HWC prone areas, focusing on women	200 persons			On track		Selection of targeted members of the beneficiaries began as planned and is ongoing.
	Education for HWC victims, families and children	40 persons			On track		Selection of targeted members of the beneficiaries is ongoing.
	Learning from best practices	3 exposures			On track		This activity is little delayed and will be implemented in fourth quarter.
	Livelihood for Community Forest (CF) users	1 group			On track		This activity will be implemented in fourth quarter.

IR	Activities	Target	Ye Q1 Q2	ear II 2 Q3	Q4	Status	Achievements	Remarks			
	Feasibility survey for tea plantation	10 ha				On track		With the technical inputs from the tea expert and based on the communication with Government line agency (Tea and Coffee Development Board), site selection for tea promotion has been done. Tea plantation will be piloted in the abandoned agriculture fields in Bhadaure-Tamagi VDC. The farmers will start plantation in August before monsoon stops. The farmers also visited nearby Lwang tea plantation areas located in the similar altitudinal and climatic conditions to learn tea farming techniques.			
	Cultivation of broom grass and cardamom	10 ha				On track	Both broom grass and Cardamom plantation is initiated in Tanahu, Lamjung, Kaski and Gorkha.	This will continue in fourth quarter also			
	Swertia cultivation and marketing	2 sites				On track		Grant to community in process.			
	Agro-based enterprises	13 no.				On track		Grant to community in progress			
	Bamboo plantation and handicraft	23 ha				Completed	A total of 1,140 bamboo saplings were planted in 8.9 ha of marginal land in Kanchanpur, Dang and Banke districts by engaging 323 people.				
	Conservation model village	2 no.				On track	Grant to community under process.				
1.5	Creation, amendment and enforcement of biodiversity policies and strategies supported										
	Provide support for the preparation and implementation of National Biodiversity Strategy	2 policies				On track	Technical inputs in upgrading National Biodiversity Strategy are being provided regularly.	Initial plan to support to National Conservation Strategy has been dropped.			

ID	Activities	Target	Year II				G4.4		D 1
IR	Activities		Q1	Q2	Q3	Q4	Status	Achievements	Remarks
	Species declaration guideline for birds	1 guideline					On track	ToR finalized	Preparation of guideline will be completed in the fourth quarter.
	National level CSO consultation on National Biodiversity Strategy (NBS)	2 consultations					Delayed		Will be done in the early part of the fourth quarter.
	Policy awareness on National Parks and Wildlife Con- servation Act and other conservation policies	8					On track		Preparation of policy awareness materials is ongoing and is expected to be prepared by mid-3 rd quarter. The awareness program will be started as soon as the materials are prepared.
	Support ACA handover process	1 no.					On track		Interaction with NTNC senior management team is ongoing.
	Policy advocacy on buffer zone (BZ) policy	1 no.	-				Completed	Altogether, 32 participants from 7 Buffer Zone Management Councils (BZMCs) (Suklaphanta WR, Bardia NP, Banke NP, Chitwan NP, Parsa WR, Koshitappu WR, and Langtang NP) participated in BZ policy advocacy.	
	Promotion and awareness on gender and social inclusion related issues	3 no.					Delayed	Himalayan Grassroots Women's Network Nepal (HIMAWANTI was recently provided a sub-award for a gender policy brief.	This activity will be conducted after receiving the findings of the policy discourse.

Completed

On track

Delayed

Cancelled

Highlights of key activities conducted during the quarter are described below.

Sub-IR 1.1: Threats to focal species reduced

Research on ecology of grey wolf (Activity- 1.1.2.4)

The ecological study of grey wolf is particularly important because wolves are major predators in high altitude environments, and play a crucial role in maintaining herbivore populations. The abundance of wolves is also an indicator of a healthy ecosystem. Despite its critical role, the population, ecology, range, and distribution of grey wolf is poorly understood. To study the demographic characteristics (number of individuals, sex and age) and distribution, feeding ecology, and extent of human-wolf conflict, NTNC initiated a long-term study of grey wolf. The study is taking place in the northern part of CHAL, mainly in Annapurna Conservation area (ACA) and Manaslu Conservation Area (MCA). Currently, the ground work for this study is being initiated in four VDCs (Surkhang, Chhosher, Chhonup and Ghemi) of ACA and three VDCs (Samagaon, Lho, and Chhekampar) of Manaslu CA. Twenty grids of 5 km X 5 km each have been laid out in the sampling VDCs, and NTNC's biologists and technicians are collecting information according to the study methodology. Due to seasonality and visibility of the species in the area, this activity will continue into the fourth quarter.

Survey on status and distribution of musk deer (Activity 1.1.2.5)

In Nepal, the musk deer population is reported to be declining due to poaching, habitat destruction and degradation, and domestic livestock pressure. Musk deer are killed for the musk pod, used mainly for traditional medicine. The current status of the musk deer population in Manaslu is not known, so NTNC initiated a scientific study of this protected species. The study is expected to provide baseline information on the population size and distribution in the Manaslu region. The main objectives of the study are: i) determine status and distribution of musk deer in MCA, ii) map the primary habitat of musk deer, and iii) identify threats to the species and recommend conservation measures. The study will be focused in Bhi, Prok, Lho, Samagaon, Chumchet and Chhekampar VDCs. Survey methods include pellet counts, drives and habitat preference identification.

Training and establishment of Citizen Scientists in target communities (Activity 1.1.3)

A two-day training was conducted on 6 and 7 May 2013, and involved 30 local youths who were trained to be citizen scientists. The training provided the opportunity to engage the youths in various conservation activities including information gathering and biodiversity monitoring. The participants represented 30 CFUGs in Gorkha, Lamjung, Kaski, Tanahun, Syangja, Parbat and Gulmi districts. The participants were trained in methodologies for biodiversity monitoring, and use of global

positioning system (GPS) and digital cameras. WWF Nepal provided a grant to FECOFUN to purchase 30 GPS devices and digital cameras, which were distributed to the citizen scientists. A profile of the 30 citizen scientists is included in **Annex 3**.

To date, the Hariyo Ban Program has trained 71 citizen scientists in TAL and CHAL. It is anticipated that the information gathered by the citizen scientists will be very useful in conservation initiatives.



Figure 3 Participants of Citizen Scientist training practicing with GPS devices

Establishment, training and equipping community-based anti-poaching groups, including information-gathering networks (Activity 1.1.3)

Support has been provided for the formation, strengthening mobilization of community based antipoaching groups in TAL and CHAL. Community based anti-poaching units (CBAPUs) are instrumental in raising community awareness, patrolling important biodiversity areas, helping GoN to control illegal activities including illegal harvest of forest resources, wildlife poaching and trade of wildlife parts. During this quarter, a total of 64 CBAPUs (8 in CHAL and 56 in TAL) were formed in Bardia, Kanchanpur, Surkhet, Kaski, Gorkha and Tanahun districts. Though only 11 CBAPUs were planned for this quarter,



Figure 4 CBAPU conducting a monthly meeting in Karnali River corridor

more CBAPUs were formed particularly to address the needs in the new areas, such as in Taranga in the northern buffer zone of Bardia NP.

A total of 1,009 people, including 314 women, are involved in community anti-poaching operations. Members of newly formed CBAPUs were trained and provided with field gear such as torchlights and jackets, for effective patrolling. A total of 9 CBAPUs were mobilized. The CBAPU members collected equipment such as traps, nets and hatchets used to kill wild animals and illegally harvest fuel wood and timber. Other activities performed by CBAPUs are listed below:

- CBAPUs of Chumchet and Sirdibas VDCs of Manaslu Conservation Area (CA) collected 33 guns and handed them over to the District Police Office in Gorkha.
- CBAPU of Prok VDC of Manaslu CA monitored important wildlife habitats and collected 17 ropes and 3 wire snares used to trap wild animals, mainly bear and musk deer. Members of the CBAPU were also mobilized for 5 days of monitoring of forest areas in and around Pansing and Nyak peaks of Sirdibas VDC during the last week of May 2013.
- In TAL, CBAPU/*Banheralu* (forest watchmen) confiscated 280 cubic feet of timber, 50 axes, 1 catapult, 1 hammer, 2 iron rods, 76 sickles, 1 spade and 8 wildlife trap nets during patrolling.

Human-wildlife conflict mitigation (HWC) (Activity 1.1.4)

This activity mainly included the installation of 15 km of new electrical fencing in Bhimapur VDC, and maintenance of 25.9 km of existing fencing in Neulapur of Bardia district. The newly erected 15 km fence has successfully controlled the movement of wild elephants from Katarniaghat Wildlife Sanctuary in India, which used to cross the border into the farmland and settlements on the Nepal side. This fence has benefitted over 1,200 households in Bhimapur and nearby areas. Similarly, 1,242 households in Neulapur are directly benefitting from the maintenance of 25.9 km of fencing there.

In Chitwan, 7.32 km of electric fence was installed along the eastern boundary of Pancharathna CF in Rantnanagar Municipality. Ground work has been initiated to install electrical fencing in the periphery of the Chaturmukhi CF in Jutpani VDC, Chitwan. Chaturmukhi CF lies in the north-eastern section of the Barandabhar Corridor, where rhino-human conflict has been increasing in recent years. The installation of fencing will be completed by the end of July 2013, and will help to minimize the conflict significantly.

In addition, solar-powered electric fencing is currently being installed to minimize crop depredation by Himalayan Black Bear in Namrung, Manaslu CA. This is the first time solar fencing has been used for this purpose in Nepal, and the installation will be completed by the end of July.

Sub IR 1.2: Threat to targeted landscapes reduced

Wildlife habitat (grassland) management (Activity 1.2.1.4)

Degradation of wildlife habitats has resulted in inadequate food availability, pushing wildlife to move beyond conservation areas in search of food, which often leads to human-wildlife conflict and increased vulnerability to poaching. The forest areas in the buffer zones are extended habitats for wildlife, and play a pivotal role in supporting wildlife populations. In order to improve the habitat conditions in these areas, the Hariyo Ban Program has initiated grassland management activities in Nawalparasi and Kailali districts in the buffer zone areas of Chitwan National Park and Bardia National Park, respectively. Similar initiatives have been pursued in Namuna Buffer Zone Community



Figure 6 Namuna BZCF users undertaking grassland management work, Pithauli, Nawalparasi

Forest, Nawalparasi (near Jatayu Restaurant for vulture conservation) where 70 ha of natural grassland was established and is currently managed along the river bank. Once dominated by tall grasslands, the area was encroached by woody perennials. The unwanted bushes were cleared and the land opened up to promote a variety of grass species. The improved grassland is expected to be viable habitat for <u>Bengal floricon</u> (*Khar mayur*) and other wildlife. In addition, this area will be the source of fodder and thatching materials for local communities, particularly poor households. The overall activity is expected to be completed by the end of June, 2013.





Figure 7 : Before and after - community participation in Bhutaha wetland restoration in Namuna BZCF, Nawalparasi

Another 30 ha patch of grassland has also been managed at Janakalyan and Kopila CFUGs in Karnali River Corridor. The community has uprooted invasive *Chromolina* spp and other shrubs. Fire is controlled to promote a regular supply of green grass from this area. A total of 168 users (65 women) were mobilized in grassland management in these areas. Furthermore, a grant agreement has been signed with Kamdi CFCC and Chitwan DFO for grassland management.

Sub-watershed management plan (1.2.5)

Discussions with District Soil Conservation Office (DSCO) have been conducted to revise the Kerunga khola sub-watershed management plan prepared by the DSCO of Nawalparasi in 2001. The existing sub-watershed management plan fails to include downstream areas and address recent issues arising from changes in the physical features of the river. The DSCO requested assistance from the Hariyo Ban Program for revision of the plan. CARE is facilitating this process and the ToR for hiring a consultant has been finalized.

Similarly, CARE is supporting the implementation of Sirdi sub-watershed management plan prepared by DSCO, Gorkha. This collaboration will follow integrated and participatory watershed management planning promoted by GoN and will add additional elements that Hariyo Ban is promoting around climate change adaptation. The DSCO, Gorkha has made a commitment to provide technical and financial support of Rs. 170,000, 23% of the total estimated budget of Rs. 737,000 for implementation of the plan. The major activities are conservation of water sources; trail improvement; plantation of fodder trees, broom grass and fruit trees; cultivation of cash crops; gully erosion control; formation of Nangedada agriculture group; and establishment of a Community Learning and Action Center.

Sub-IR 1.3: Internal Governance of Community Groups Responsible for Ecosystem Management Strengthened

Strengthening governance of natural resource management groups (Activity 1.3.1)

A variety of activities was conducted during this reporting period to strengthen governance in NRM groups. These included training of NRM groups on governance aspects, biodiversity conservation, and GESI; leadership capacity development of local level women leaders; orientation on community forestry development guidelines; and an awareness raising program through Frequency Modulation (FM) Radio and information, education and communication (IEC) materials. The impact of various

governance related activities of Hariyo Ban have started to become visible in different CFUGs. As a result of governance training, the CFUGs managed to recover some group funds that had previously been misused. This activity was also helpful in increasing the representation of women and marginalized communities in the executive committees, allocating group funds to support livelihoods of poor households, maintaining more transparent operation of CFUGs, and increasing coordination and linkages with other agencies. Community Learning and Action Centers have also contributed to strengthening the governance of CFUGs by raising pertinent issues and demanding more transparent and accountable CFUG actions.

Interaction program on buffer zone issues

An interaction program on buffer zone issues was organized in Sauraha, Chitwan from 9th May to 11th May, 2013. The main objective of the program was to develop a common understanding on buffer zone issues among the Buffer Zone Management Council (BZMC) members, and to prepare an action plan for further implementation.

A total of 32 participants, including 7 women, participated in the interaction program on buffer zone issues from 7 BZMCs (Suklaphanta Wildlife Reserve, Bardia National Park, Banke National Park, Chitwan National Park, Parsa Wildlife Reserve, Koshitappu Wildlife Reserve, and Langtang National Park). Other participants in the program included the acting Conservation Officer of Chitwan National Park and staff of Hariyo Ban Program consortium partners.

Nepal Rural Self-Reliance Campaign (NRUSEC), a local NGO supported by CARE under Hariyo Ban, facilitated the event. The participants discussed, identified and prioritized pertinent issues for effective management of biodiversity resources in BZ areas, as well as an appropriate benefit sharing mechanism. The major issues raised were the need to revise the National Park and Wildlife Conservation Act 2029, and to revise the BZ Management Regulation 2052 and guideline 2056. The participants also discussed the need for increased access of buffer zone communities to natural resources to conserve, manage and utilize natural and forest resources. As part of the meeting, information was shared on the Hariyo Ban Program.

<u>Leadership capacity development of local level women leaders/power agents for NRM and biodiversity conservation (Activity 1.3.3.7)</u>

The Hariyo Ban Program organized four leadership development training sessions for 126 representatives (122 women) from CFUGs in Makwanpur, Lamjung and Gorkha districts. The main objective of the training was to enhance the leadership capacity of CFUG leaders, particularly women.

The CF Development Guidelines clearly mention representation of women in various positions on the executive committees of CFUGs. However, due to inadequate leadership skills and male domination, their roles in the decision making process has not been as effective as it should be. Women have detailed traditional knowledge of natural resource management, and the forests are critically important in day to day activities of women, so their participation is very important.

The training was organized to develop the leadership capacity of women. The content of the training included discussion about community forest development guidelines; challenges and issues of women's participation in decision making, particularly in key positions; challenges of the role of women in biodiversity conservation and forest management; leadership enhancement techniques; characteristics of a good leader; and ways to overcome challenges faced by a leader. It is expected that

the knowledge gained by the participants will be instrumental in enhancing leadership qualities of women in decision making positions.

Sub IR 1.4: Income from sustainable sources of livelihoods for forest dependent communities increased

<u>Support community groups for livelihoods improvement planning, green enterprises and ecotourism (Activity 1.4.1)</u>

Support for green enterprises

As reported in the last quarterly report, a 4-day Skill Development Training on sisnu powder production was organized during 2-5 April in Barpak VDC. Eleven entrepreneurs including 9 women and 6 dalits took part in the training, and learned skills for sisnu powder production, business management and marketing. The CFUG, with support from the Hariyo Ban Program, has drafted a sisnu powder enterprise operation guide that includes selection criteria for entrepreneurs, and guidance for the formation of a management committee, business plan, benefit sharing



Figure 8 : Sishnu Powder on sale at DDC hall, Gorkha

mechanism, and terms and conditions for operation of an enterprise.

The machines for powder production have been set up and production started in May 2013. A total of 80 kg of sisnu powder was produced, of which 40 kg was sold for Rs. 13,520. According to the business plan, the expected annual income is about Rs. 540,000 with a net profit of Rs. 116,303. Sisnu powder production is expected to start at full capacity in mid-August 2013.

Despite a promising start, the enterprise is facing challenges including the lack of a production room in good condition, as well as delays in expediting the marketing process, which has been due to the misappropriation of CFUG funds by the previous executive committee of the Ragar CFUG. The Ragar CFUG is coordinating with external agencies for resources to fix the leaking roof of the currently available production room. The Ragar CFUG has also requested further support from the Hariyo Ban Program for labeling and branding of the sisnu product, linkage with the network of regional and central level markets, and capacity building activities.



Figure 9: LDO during exposure visit of LRPs and enterprenuers of Sisnu powder at DDC hall, Gorkha

An exposure visit and interaction program with district level stakeholders was organized to develop linkages with local market and sisnu powder entrepreneurs. A total of 11 participants, with 7 women, participated in the exposure visit, which included representatives of Ragar CFUG, sisnu powder

entrepreneurs and LRPs. A one-day interaction program with district level stakeholders was organized. A total of 45 individuals from key government line agencies, representatives from major political parties, media, FECOFUN, Chambers of Commerce, Gorkha Ayurved Company and NGOs took part in the interaction program. This event was successful in raising awareness about the enterprises among multiple stakeholders. The district level stakeholders committed to linking up with markets and other regulatory activities.

Skill based training

The Hariyo Ban Program provides support for skill based training for marginalized communities, which helps enhance their livelihoods. A total of 56 people (17 women) from Bardia district were trained in various skills such as tailoring (4 persons), carpentry (1 person), motorcycle maintenance (15 persons), mobile repairing (15 persons) and basic computer (10 persons) training. Out of 56 people, 40 people were CBAPU members who mostly come from the marginalized communities, such as Tharu. The remaining five people were from poor and vulnerable households of CFUGs. It is expected that the acquired skills will be useful in gaining employment and generating income.

A profile of the skill-based training participants is given in **Annex-4**.

Sustainable Landscape Management

IR 2: Greenhouse gas (GHG) emissions reduced and sequestration enhanced

Objective: To build the structure, capacity and operations necessary for effective sustainable landscapes management, especially reducing emissions from deforestation and forest degradation (REDD+) readiness.

Indicators - 2.1 Hectares of deforested and degraded forest area under improved biophysical condition 2.2, Annual rate of deforestation and forest degradation in the target landscape will be reduced 2.3 GHG emissions (Metric Ton (MT) of Carbon Dioxide (CO₂) equivalent) will be reduced or sequestered; USAID standard indicator 4.8-7 Quantity of greenhouse gas (GHG) emissions, measured in metric tons of CO2e, reduced or sequestered as a result of USG assistance

The main strategy of this component is to work with the Government of Nepal to develop enabling policies for REDD+ readiness; build capacities of the Government officials and civil society for GHG monitoring and equitable benefit sharing mechanism; support local communities and government line agencies to address the drivers of deforestation and forest degradation' and support establishment of payment systems for ecosystem services including REDD+.

During this quarter, in response to requests from the Government of Nepal, Hariyo Ban supported the preparation and implementation of three major policies and strategies relevant for REDD+. These policies and strategies include: (i) forestry sector strategy for Nepal, (ii) National REDD+ strategy, and (iii) preparation for implementation of the National Land Use Policy. The procurement process within the Government of Nepal system took a long time, so these activities have just begun. The activities implemented during this reporting period include: REDD+ sensitization workshops at the community level; training on PES and REDD+, and orientation on sustainable forest management; community consultation on the forest carbon benefit sharing mechanism; Community Forest Operational Plan (CFOP) renewal; consultation on the benefit distribution mechanism through REDD+; media mobilization; and exposure visits and activities to address the drivers of deforestation and forest degradation, including biogas installation, forest fire management training, awareness workshops on forest fire fighting, and improved cooking stove training.

A total of 52,741 people, including 26,439 women (50%), 6,412 Dalit (12%), 23,727 Janajatis (50%), 21,626 Brahmin/Chhetri/Thakuri (41%), 616 Madhesi (1%) and 360 others (1%) participated in various training workshops, campaigns, governance assessments, and other activities during this reporting period.

Table 2: Summary of progress in Sustainable Landscape Management

IR	Activities	Target	Year II Q1 Q2 Q 3 Q4	Status	Achievements	Remarks							
2.	Sustainable Landscape M	anagement											
2.1	Analysis, formulation and execution of REDD+ policies and strategies supported												
2.1.1	Support formulation, amendment and implementation of policies, strategies, standards and guidelines for national REDD+ program												
	Consultation workshop for REDD Strategy development: national, regional and district level (through consultancy)	8		On-track	GoN formed technical committee for REDD+ strategy development. Sustainable Landscape Coordinator providing input to the committee as a member of the committee. Technical committee provided feedback on the draft framework for REDD+ Strategy.	The REDD Cell is yet to present the revised framework, prepared in the second quarter, to the REDD Working Group for endorsement. The consultation process for REDD+ Strategy formulation will begin only after the endorsement of the framework by the REDD Working Group, so the consultation process has been delayed.							
	Support MoFSC in developing National Forestry Strategy (consultancy)			On-track	Request received from MoFSC; consultant hired; work in progress	The MoFSC selected three consultants to do this assignment. Two of them are paid by the Multistakeholder Forestry project, and Hariyo Ban is supporting a third.							
	Preparation of SES monitoring plan, including national assessment report and consultation with stakeholders (consultancy)	1		Delayed		The REDD Cell is planning to conduct this assignment in parallel with the Strategic Social and Environmental Analysis[proposed with support from the World Bank Forest Carbon Partnership Facility (FCPF)							

IR	Activities	Target		ear II Q 3 Q4	Status	Achievements	Remarks
	Support implementation of National Land Use Policy	1			On track	Grant agreement prepared in June and the agreement was made with the Ministry of Land Reform and Management (MoLRM) in the first week of July	MoLRM has begun preparing Land Use Implementation Plan and is disseminating the National Land Use Policy
	WWF Finland/ Ministry of Foreign Affairs (MFA): REDD project				On track		
2.1.2	Support capacity building and RPP	and streng	thening (of institutio	onal frameworks including	the National REDD Cell to in	nplement REDD+ strategy
	Support strengthening of the Landscape Support Unit, MoFSC	1			On track	Discussions held and request from the MoFSC to strengthen the Landscape Support Unit received	
	REDD+ sensitization workshop at community, district and national levels	50			On track	A total of 14 awareness workshops and trainings were conducted by consortium partners. Altogether 512 people participated in this awareness and orientation.	A total of 38 individuals from government (1), international/non-government organization (I/NGOs) (10) and community groups Conservation Area Management Committee (CAMC) members of Manaslu Conservation Area Project (MCAP) and Bhujung/Annapurna Conservation Area Project (ACAP)] participated in the workshop. This included 12 BCT, 25 Janajati and 1 Madhesi; 3 were female. 38 individuals participated in a community level REDD+sensitization workshop organized in MCAP.

IR	Activities	Target	Year Q1 Q2 Q		Status	Achievements	Remarks
	Support participation of government and civil society representatives in international trainings				Delayed		Discussion with GoN ongoing based on training needs assessment (TNA) which has been recently finalized.
	Support Department of Forests (DoF) in national CF workshops	1			On track	Preparatory Workshop for the Sixth National Community Forestry Workshop organized in April 27-28. There were 51 participants (21 from GoN, 25 from non-government and 5 observers) participated in the workshop. Themes for the national CF workshop finalized during this workshop; it will be held later this year	
2.1.3	Support for developing prestablish forum to discuss			-	-	for REDD+ policies, strategic	es and guidelines and
	Support the updating of the REDD+ training manual (through consultancy)	1			On track	Draft manual developed in collaboration with other stakeholders	Printing and distribution will be done in the next quarter.
	DoF to develop operational guidelines and resource materials in collaboration with other partners/projects (in-kind support through consultancy)	3			On track	DoF prepared ToRs for forest product sale and distribution guidelines and CF financial management guidelines, and requested the Hariyo Ban Program provide financial and technical support	Hariyo Ban will provide support once the TOR is received from the DoF.

IR	Activities	Target		Year Q2 Q	II 3 Q4	Status	Achievements	Remarks
	Support regional directorate to assess CF status in CHAL (through consultancy)	1				Delayed		Will be initiated upon receipt of the final ToR from the Regional Forestry Directorate
	Poster/pamphlet preparation	15,000				On track	GON, Hariyo Ban Program and other partners worked to develop extension materials on REDD+ which are ready for printing	
WWF cost share	WWF Finland/MFA: REDD project							
	Support MFSC for developing forestry sector strategy							A draft strategy was formulated by the REDD cell/GoN, which was a basis to develop a framework for the National REDD Strategy. The National REDD Strategy had to be revised given broader discussion in the REDD+ process in the United Nations Framework Convention on Climate Change (UNFCCC) negotiations.
2.2						equitable benefit sharing o	leveloped	
2.2.1	Build capacity at all levels	s for forest g	governa	ince,	invento	·		
	Raise awareness on REDD+ and Monitoring, Reporting and Verification (MRV) at the landscape level					Delayed		This will be conducted when the Forest Carbon Assessment starts in CHAL in July 2013. The forest carbon assessment is intentionally delayed, to ensure that it is fully undertaken in one season to minimize seasonal variability in the assessment process

IR	Activities	Target	Year II Q1 Q2 Q 3 Q4	Status	Achievements	Remarks
	National consultation workshop on REDD+ and MRV	2		Delayed		This activity was delayed as the National MRV framework development from the REDD Cell has just begun. The consultation will be carried out in the next quarter
	LRP Accreditation with Council for Technical Education and Vocational Training (CTEVT)	1		Delayed		CTEVT did not publish accreditation notice during this period. Planned for fourth quarter.
	Establishment of community learning and action centers (CLACs), and follow-up activities	20		Completed	The 142 centers mobilized under both CARE (130) and FECOFUN (12) are functioning. A total of 13,681 members are affiliated.	
	Training of NRM groups of REDD+ and GHG (focus on poor, vulnerable, women and marginalized groups) (through consultancy)			On track	69 events completed; altogether 2,413 participants.	Though this activity had been slightly delayed due to other priority work, it started in April 2013 and is now on track.
	REDD+/forestry related policy orientation at BZ level	75		Delayed		Delayed. Will start after the endorsement of the REDD+ strategy framework by the REDD Cell.
	Media mobilization on REDD+	2		Completed	2 events completed: participants observed various activities conducted by the Hariyo Ban Program	

IR	Activities	Target	 Year Q2	r II Q 3 Q4	Status	Achievements	Remarks
	Training on REDD+/climate change for the Hariyo Ban team	2			Completed	48 people received training in Pokhara and Dhangadhi	
	Exposure visit on PES	10			On track	one exposure visit organized for media personnel, CFUG members and CBAPU members	
WWF	WWF Finland/MFA:						
cost share	REDD project						
	Media awareness for local media persons on REDD+ and Climate Change in TAL				On Track	A grant has been signed with Nepal Forum of Environmental Journalists (NEFEJ) (Rupandehi branch) to conduct three media awareness workshops in the coming quarters on Climate Change and REDD+	
	Support participation of high level officials of the MoFSC/GoN in the REDD Reference level workshop in and the REDD-FCPF design Forum				Completed	The secretary of the MoFSC and the joint secretary of the REDD cell were supported partially to attend a workshop on REDD Reference levels hosted by the WWF United States and the FCPF/World Bank in USA from 28-31 st of January 2013. The workshop provided an insight and understanding to developing reference levels and submitting it to the UNFCCC-web-portal and the FCPF	

IR	Activities	Target	Q1	Year II Q2 Q 3 Q4	Status	Achievements	Remarks
2.2.2.	Support establishment and	maintenan	ce of fa	orest carbor	accounting system		
	Maintain and update the forest carbon inventory and MRV data periodically in support and collaboration with Department of Forest Research and Survey (DFRS)/FRA and capacitate GoN/CSO representatives	ongoing			On Track	Hariyo Ban is working in collaboration with DFRS/FRA and Arbonaut on forest carbon inventory and MRV data collection to develop TAL level Reference Emission Level	
	Forest carbon inventory training for LRPs, including inventory work and purchase of local equipment (through consultancy)	3			On Track	Inventory work in progress. The trained students of Institute of Forestry (IoF) will undertake LRP training.	
2.2.3	Support design and implen	nentation of	an equ	uitable bene	fit sharing mechanism for R	EDD+ program	
	Policy awareness on REDD+ (benefit sharing mechanism at regional level)	1			Delayed		Will be conducted after receiving final report from consultant on benefit sharing mechanism. Draft report is ready
	Community awareness on REDD+ (carbon rights and benefit sharing)	5			On Track	One event completed; 38 people participated	Will be conducted after receiving final report from consultant on benefit sharing mechanism. Draft report is ready
	Safeguards and Free Prior and Informed Consent (FPIC) ToT	8					No activities planned in this quarter.

IR	Activities	Target	Year II Q1 Q2 Q 3 Q4	Status	Achievements	Remarks						
2.3	Drivers of deforestation an	id forest deg	gradation analyzed ar	nd addressed								
2.3.1	Address the drivers of deforestation and forest degradation											
	Grants to local communities for biogas plant establishment in CHAL (650), toilet installation support in TAL (1,500)	550		On track	463 biogas plants constructed, 276 toilets attached to biogas plants in TAL							
	Support Alternative Energy Promotion Centre (AEPC) for subsidy for biogas plants. Support BSP in biogas monitoring.	1000		Completed	Grant provided to Alternative Energy Promotion Centre (AEPC) for 1300 plants (350 from Hariyo Ban fund and 950 from WWF cost share)							
	Fire line maintenance in CF	250 km		Completed	248 km of fire line maintained							
	Forest fire hazard mapping (through consultancy)	1		Delayed	ToR developed. Consultant selection is ongoing.							
	Forest fire management training and tool support (through consultancy)	13		On track	Seven trainings organized this quarter. 286 people trained. Firefighting equipment provided to 8 CFUGs; two forest fire sensitization workshops were conducted (one each in TAL and CHAL) with US Forest Service support	Will be completed in fourth quarter.						
	Forest Fire fighting sensitization campaign	140		Completed	67 campaigns conducted this quarter; 2,602 participants.	68 campaigns had been conducted in Q2. This activity is now complete.						

IR	Activities	Target	Year II Q1 Q2 Q 3 Q4	Status	Achievements	Remarks
	Improved Cooking Stove	1850		On track	296 ICSs installed in TAL;	
	(ICS), smoke hood/metal	number			25 metal stoves provided to	
	stove, iron prayer flag				poor households; 120 iron	
	establishment support				prayer flags provided to local	
					communities	
2.3.2	Promote community base	d sustainabl	e resource manager	nent and good governan	ce	
	New nursery	12		On track	A total of 344,160 seedlings	
	establishment and				grown in nurseries of DFO,	
	strengthening of existing				DSCO and private nurseries	
	nurseries				in Kaski, Tanahun, Gorkha,	
					Lamjung, Palpa, Syangja,	
					Kailali, and Bardia districts	
	Plantation support in	1575 ha		On track	Grant agreements signed for	
	deforested, degraded and				plantations	
	private land					
	Support NRM groups to	2		On track	Support provided to 2 groups	
	address and reduce drivers				to address the drivers of	
	of deforestation and forest				deforestation and forest	
	degradation				degradation.	
	Leasehold forestry	9		Delayed		
	development in CF					
	PHPA training of LRPs			Completed		
	and local communities					
	Participatory Well-Being	100		On track	44 PWBR exercises held in	
	Ranking (PWBR)				TAL (Kailali and Kanchanpur)	
	Gender and Social	3		Delayed	Session plan developed;	Will be completed in fourth
	Inclusion Training on				participants selected for all	quarter.
	REDD+				three training programs	

IR	Activities	Target		Year II Q2 Q 3		Status	Achievements	Remarks
	Revision and amendment of CFOPs (through consultancy)	310				On track	A total of 16 CFOPs have been renewed and approved by DFOs this quarter.	This process is moving slowly due to an insufficient number of forest technicians in the districts. Hariyo Ban is working with the Department of Forests to speed up of this process providing external technical support
	Piloting of cardamom, turmeric, ginger, and broom grass cultivation in CFUGs for poor households (leasehold forestry concept).	9				On track	Ongoing	
2.4	Payment schemes for carb	oon credit in	cludin	g other	ecosy	stem services tested and ex	xpanded	
2.4.1		and identify	oppor	tunities	s for F	REDD+ and other PES med		
	Review and document existing practices of PES	2				On track	Review in progress.	
	Based on Integrated Valuation of Environmental Services and Tradeoffs Tool (InVEST) training, identify and assess sites to facilitate and establish a PES mechanism in CHAL	3				On track	Identified two sites (Phewa and Marsyangdi watershed) for PES mechanism development	
2.4.2	Support formulation of en	nabling polic	cies, gu	ideline	s and	·		
	PES sensitization workshop/awareness	1				Completed	Two sensitization workshops organized in Kaski and upstream	

IR	Activities	Target		ear II	Status	Achievements	Remarks
	building					area of Phewa watershed	
	Interaction program on upstream and downstream linkage with celebrities	4			On track	Two interaction meetings were organized with the Hotel Association in Pokhara to identify PES feasibility in Phewa watershed.	
	Training on PES tool (InVEST) and Reference Emission Level (REL)	5			Completed	REDD Specialist from CARE, and three staff from WWF participated in InVEST training in Bhutan during 3-9 December 2012.	The InVEST tool was developed by the Natural Capital Project (NatCap) in partnership with WWF, The Nature Conservancy, Stanford University and University of Minnesota.
2.4.3	Develop and implement a	carbon fina	ncing pr	oject			
	Develop second Gold Standard biogas in TAL	1			On track	ToR developed; proposals received from consulting companies; consultant selection in progress	
	Study and analysis of drivers of deforestation/ forest degradation, and development of Emission Reduction Project Idea Note (ER-PIN) for TAL	2			On track	Four multi-stakeholder meetings to develop ER-PIN organized.	
	Validation of biogas Project Design Document (PDD)	1			On track; consultant selection in progress		Will start in fourth quarter

Completed On Track Delayed Cancelled

Highlights of the key activities under this component are given below.

Sub IR 2.2: Capacity for forest inventory and GHG monitoring, and equitable benefit sharing developed

Payment for Ecosystem Services (PES) Activity 2.2.1

Orientation trainings on Payment for Ecosystem Services (PES) and REDD+ were conducted for Hariyo Ban Program staff. These trainings provided the opportunity to share and discuss the basic concept of PES & REDD+; ongoing initiatives at international and national levels; and technical, financial and legal/policy aspects of PES and REDD+. WWF has initiated discussions with the Hotel Association of Pokhara and Phewa watershed stakeholders for a possible PES mechanism for sediment reduction and retention upstream to reduce the rate of siltation in Phewa lake. Valuation of sediment reduction and retention under different land use land cover scenarios is being developed. The findings will be shared with stakeholders, and support will be provided for developing PES implementation and monitoring plans. CARE has initiated a pilot PES project in Middle Marsyangdi hydropower area, where the project team conducted a preliminary field visit and performed stakeholder consultations with the Hydropower Company, Lamjung District Development Committee (DDC) and communities on 5 March 2013. Cime Hydropower in upper Marsyangdi, Khudi Hydropower and Middle Marsyangdi Hydropower and DDC were very interested in initiating and collaborating on a PES initiative in the Marsyangdi river corridor. The field visit and stakeholder consultations were useful to formulate ToR for the technical work, which includes baseline analyses, scenario planning and feasibility assessment for PES initiatives in the Marsyangdi basin.

Sub-IR 2.3: Drivers of deforestation and forest degradation analyzed and addressed

Identify appropriate community based measures to address REDD+ drivers in CHAL (activity 2.3.2)

Biogas installation

Biogas plant installation is an intervention that is important for biodiversity conservation, sustainable landscape management and climate change adaptation, and is embedded in all three components of the Hariyo Ban Program. Through the TAL Program, WWF adopts a revolving fund approach to biogas installation in which the CFCCs are granted revolving funds, which are used to provide loans to needy households of the CFUGs so that they can install biogas. NTNC provides grants directly to the communities. WWF is also providing subsidies for biogas plants installed through



Figure 5 Toilet attached to biogas plant

AEPC. However, the households supported for biogas plant establishment with NTNC support are getting subsidies directly through AEPC.

Under this component, a total of 463 biogas plants were installed during the reporting period in Kanchanpur, Kailali, Bardia, Banke, Dang, and Chitwan districts with support from Hariyo Ban

Program. Out of the 463 plants, 409 plants were installed through the revolving fund approach, and the rest were installed through direct grants. All of these biogas plants will have toilets attached. A total of 276 (59%) toilets have been completed, and the construction of the remaining toilets is ongoing.

Under the revolving fund, once the households start to repay the loan, more funds will be available to build new plants. For this reason, the biogas plant installation work will continue in these communities without additional support from the TAL or Hariyo Ban Program. The funds are mobilized through the local cooperatives.

Table 3. Amount of revolving fund provided to CFCCs and NGOs

District	CFCC/NGO/BZUC	Amount of revolving fund (Rs.)	# of biogas plants to be installed	# of biogas plants completed by end of June 2013	# of biogas plants with toilet attached
Kanchanpur	Chure Conservation Network	1,350,000	75	40	13
Kailali	Balchaur Cooperative	1,620,000	90	44	46
Kailali	Balchaur Forest and Environment Resource Development Centre (BAFER)	360,000	20	0	0
Banke	CFCC, Kamdi	738,000	41	40	7
Dang	CFCC, Gadhawa	1,458,000	81	81	0
Banke	CFCC, Mahadevpuri	1,620,000	90	93	93
Kanchanpur	CFCC, Mohana	360,000	20	0	0
Chitwan	Budhi Rapti BZUC	1,998,000	111	111	111
Chitwan	Patihani BZUC	360,000	20	0	0
Chitwan	Lothar BZUC	270,000	15	0	0
Bardia	Shreeramnagar BZUC	480,000	25	0	0
Total		10,614,000	588	409 (70%)	270 (59%)

Forest fire management

Controlled burning is an important tool for forest management and it is required for some tree species to germinate. Hence, not all fire is bad for forests. However, unplanned and uncontrolled forest fires are a key driver of deforestation and forest degradation, and are a threat to biodiversity. The risk of fire is likely to be heightened as climate change advances and climate variability increases, due to longer dry spells and increased temperatures. Raising awareness among local communities is a key approach of the Hariyo Ban Program to curb the damage caused by forest fires. Hariyo Ban also provides the knowledge and skills necessary for communities to fight fires. Activities carried out during this reporting period include: forest fire fighting sensitization campaigns, forest fire management training with firefighting tools, and construction of fire lines.





Figure 6 Glimpse of Fire Management Training; Lamjung and Tanahun

A total of 67 fire-fighting sensitization campaigns were carried out in Rautahat, Bara, Parsa, Makwanpur, Nawalparasi, Chitwan, Syangja, Parbat, Palpa, Gulmi, Gorkha, Lamjung, Tanahun and Kaski districts. This benefitted 2,602 people, including 1,288 women. Similarly, forest fire management trainings, with fire-fighting tools provided, were conducted in Gorkha, Lamjung and Tanahun districts. A total of 244 people (143 women) were trained in forest fire management, including the handling of firefighting tools.

In order to control the spread of forest fires, 5 km of new fire line were prepared in Banke National Park. A total of 243 km of fire line was



Figure 7 Fire lime maintenance work completed at Janakalyan CFUG, Kailali

maintained in Brahmadev, Karnali and Kamdi corridors, and in Suklaphanta and Parsa Wildlife Reserves.

Community Forestry Operational Plan (FOP) preparation Activity 2.3.2

In Year 2, the Hariyo Ban Program planned to support the development and renewal of 387 FOPs in CHAL and TAL. During this reporting period, 16 FOPs were revised in Kaski (5), Lamjung (4), Gorkha (4) and Kailali (3), and one new FOP was developed in Gorkha. The newly amended/developed FOPs cover an area of 1207.47 ha.

A total of 19,300 people (Brahmin/Chhetri, Thakuri, Janajati, *Dalits*, Madhesi and others), including 9,844 women will directly benefit from the renewal/development of these CFOPs. On average, representation of women in the executive committees of these CFUGs is 53%. The representation of Janajatis and *Dalits* in executive committees is 34% and 20% respectively. The inclusion of pro-poor provisions in line with the Community Forestry Development Guidelines 2009, and current policy discourse, is a major improvement in the revised constitutions and CFOPs. Similarly, provision to reduce biodiversity threats, community based measures to address drivers of deforestation and forest degradation, ecosystem services, and climate change adaptation were new provisions added to the FOPs.

Promote Community-based Sustainable Resource Management and Good Governance 2.3.2

Support existing nurseries for seedling production

Restoration of degraded lands through plantation and/or natural regeneration is one of the key strategies of the Hariyo Ban Program. Inadequate availability of desired species of seedlings from the existing forest nurseries is often a major problem for plantation. In order to address this problem in the working areas, the Hariyo Ban Program has provided support for the establishment of new nurseries and the production of seedlings from existing nurseries in CHAL and TAL. Hariyo Ban has provided grants to the District Forest Offices, District Soil Conservation Offices and NRM groups for seedling production.



Figure 8 Seedling production in DSCO-Syangja

During this reporting period, grants were made to the District Forest Offices of Kaski, Tanahun, Gorkha, Syangja, Bara, Parsa and Rautahat districts; District Soil Conservation Office, Syangja; Collaborative Forest Management Group, Rangapur, Rautahat; Manahari Buffer Zone User Committee, Makwanpur; and Shreeramnagar BZUC, Bardia. These grants supported the production of 681,043 seedlings in 22 nurseries.

Major species of seedlings produced include fodder, indigenous ornamental species, medicinal and timber tree species and herb species. Further detail on species and plans for seedling production are provided in **Annex 5.** The seedlings produced will be used in plantation areas, in degraded forests for enrichment planting, and in private plantations. This will help to restore degraded areas, meet local demand for fuelwood and fodder, and strengthen

forest connectivity and consolidating blocks of forests. The seedlings will be planted in the Hariyo Ban working areas.



Figure 9 Seedling production in DFO-Tanahun

Challenges and learning in seedling production experienced Timely release of funds for seedling production is important so that production of most appropriate forest tree species can be done on time. Delay in the subaward process is now hampering seedling production.

• In the case of Tanahun and Gorkha, some seedlings of *Pinus roxburghii* were damaged by insects, so Simal, Rittha and Bakaino seedlings have been transplanted in those poly-pots instead.

Learning from seedling production

- Seedling production has created opportunities to create employment for local people.
- The high demand for seedlings shows that the local communities are interested in planting trees in communal and private land. So there is a need to increase seeding production in the future. Public as well as fallow private land will be afforested with the seedlings from the nurseries.

Climate Change Adaptation

IR 3: Capacity to adapt to adverse impacts of climate change improved

Objective: The ability of human and ecological communities to adapt to the adverse impacts of climate change increased

Indicators- 3.1 Number of people with improved adaptive capacity to cope with adverse impacts of climate change; 3.2 Rate of deforestation and degradation in forest, watersheds Rate of degradation in wetlands (invasive species, sedimentation and loss i.e. conversion to agriculture land) from non-climate stresses reduced (Level reduction from baseline). This will be measured from 2.2; 3.3 Number of organizations (government and civil society) mainstreaming climate change adaptation into their policies and plans and implemented. USAID standard indicator: 4.8.1-20 Number of climate vulnerability assessments conducted as a result of USG assistance; 4.8.2-6 person hours of training completed in climate change supported by USG assistance; 4.8.2-26 Number of stakeholders with increased capacity to adapt to the impacts of climate variability and change as a result of USG assistance.

This quarter, the approach for increasing the adaptive capacity of people and ecosystems focused mainly on climate knowledge sharing at various levels, and enhancing community capacity to prepare local adaptation plans with in-built monitoring plans applying the harmonized and integrated vulnerability assessments. Efforts were also made to harmonize adaptation plan preparation and local disaster risk management plans in line with LAPA and Local Disaster Risk Management Planning Guideline (LDRMP) guidelines. Implementation of some plans was undertaken. Target audiences for awareness raising, sensitization and training on climate change issues included GoN, consortium partners, CSOs, communities, school students and media.

A total of 66,820 people, including 35,013 women (52.40%), 33,103 Dalit (49.54%), 14,209 Janajatis (21.26%), 18,968 Brahmin/Chhetri/Thakuri (28.39%), 418 Madhesi (0.63%) and 121 others (0.18%), participated in various training workshops, campaigns and other activities during this reporting period.

Table 4: Summary of progress in Climate Change Adaptation

IR	Activities	Target	Year II Q1 Q2 Q	3 Q4 Status	Achievements	Remarks
3.	Climate Change Adaptation				•	
3.1	Government and civil society understand practices increased	ling on clin	nate change vul	nerability and geno	der- equitable and	socially inclusive adaptation
3.1.1.	Train government and civil society repre	esentatives	on climate chan	ge issues and gend	er-equitable and s	ocially inclusive adaptation practices
	Training for GON officials, partners, CSOs and CFUGs	39		On track	17 trainings completed	Due to conflicting priorities and strikes, 22 events were deferred to the fourth quarter.
	Sensitization workshop for CAMC members	25		On track	21 workshops held	4 events will be conducted in the fourth quarter.
	Workshop for school teachers	5		Completed	6 events completed	6 events were conducted, exceeding the target due to demand from school teachers
	Training on GESI for Community Users Groups (CUGs)/CBOs & CSOs	54	-	On track	12 events completed	Community level training on GESI was deferred as per community requests.
	Exposure visits for NRM groups on climate change issues	8		On track	4 visits completed	4 more visits will be organized and conducted in the fourth quarter.
	WWF United Kingdom (UK): People in					
	participatory Action for Life (PIPAL) and WWF Finland/MFA: SASK					
snare	ToT for local youths on climate change			Completed		26 youths were trained under the TOT
	101 for focal youths on chimate change			Completed	-	to become local resource persons
	ToT for trade union leaders			Completed		27 trade union leaders were trained through this program and they will be engaged in organizing trainings for trade union members.

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IR	Activities	Target	Q1	Q2	Q3	Q4	Status	Achievements	Remarks
	Orientation Program for trade union members						Completed		198 trade union members were trained on climate change issues in 4 events.
3.1.2	Mass campaigns for communities and stu	ıdents							
	Climate change awareness	562					On track	122 events were conducted during the reporting period.	Additional campaigns will be conducted in the fourth quarter.
	Day celebrations	33					On track	18 celebration events completed	15 events are planned for the fourth quarter.
3.1.3	Build the capacity of media to document and share			ng on	adap	tation	1		
	Training workshop on collaboration with Nepal Forum of Environmental Journalists (NEFEJ) and other media networks	19					On track	One training event was organized	Federation of Journalists (NEFEJ) will organize 18 events in the fourth quarter, as there were delays in contract signing.
	Documentation and printing	19 types					On track	4,000 copies of calendars and other illustrations and posters prepared	These materials were distributed to government line agencies, CFUGs, District FECOFUN, CSOs and NGOs. For others types, script writing is started and actual printing will done in fourth quarter
	Interaction and visits	26					Completed	Events were merged to support media interactions in 4 districts.	Central level media personnel from Kathmandu were supported to visit 4 districts (Chitwan, Banke, Bardia and Kailali) and interacted with local media people.

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IR	Activities	Target	Q1	Q2	Q 3	Q4	Status	Achievements	Remarks
3.1.4	Integrate climate change issues in existing	g academic	curric	cula					
	Documentation in academia	1							No activities planned in this quarter
	Support integrating Climate Change (CC) issues in existing curriculum and other learning events	512					On track		This will include 512 CC events in schools. The local NGO School Ecological Conservation Education Network (SENSE) is contracted to deliver this, which will be conducted in the fourth quarter due to delays in NGO selection.
3.1.5	Conduct research and studies and disser security, disaster risk, energy and infras		ts to e	nhanc	e kno	owled	lge on climat	e change and its ir	npacts on biodiversity, water, food
	Ground water survey	1					Cancelled		This was merged with landscape level assessment
	River basin level vulnerability	3					On track	3	Background study ongoing. Will be continued in next quarter and first quarter of year 3.
	ndscape level vulnerability assessment 1						Completed	1 landscape level assessment	Assessment completed; draft report received and used for Annual Work Plan planning for 2014; final report will be produced shortly.
WWF Cost share	WWF: Education for Nature (EFN) Scholarships: Grant support to students through Education for Nature								

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IR	Activities	Target	Q1	Q2	Q3	Q4	Status	Achievements	Remarks	
	EFN Scholarships	4					Completed	4	The students were supported for degree programs outside Nepal in areas such as protected area management, forestry, NRM and international studies.	
3.1.6	1.6 Promote public private partnerships (PPPs) for climate resilient community based adaptate							ptation practices		
	Explore and promote PPPs for climate smart community based (CB) practices						On track		Discussion initiated with Federation of Nepalese Chambers of Commerce and Industry (FNCCI)	
	Cost share activities (Climate adaptation scholarships to students)						Cancelled		This was merged with EFN scholarships	
3.2	Pilot demonstration actions for vulnerab	ilot demonstration actions for vulnerability reduction conducted and expanded								
3.2.1	Design and field test integrated vulnerab	ility assessn	nent t	ools i	n sele	cted o	communities	and ecosystems		
	Training on vulnerability assessment (VA) and PMERL for local bodies and community members	8					On track		One training will be combined with LAPA preparation, and the remaining trainings will be organized in the fourth quarter.	
3.2.2	Prepare Climate Change Adaptation Pla	n							-	
	Prepare Community Adaptation Plans	233					On track	98 CAPAs for vulnerable communities, and degraded areas plans	Data for further VAs have been collected; more VAs will be prepared in fourth quarter.	
	Prepare local adaptation plans	18					On track	One LAPA completed and others are in process.	Information for VDC level LAPA preparation is being collected and the plans will be completed in fourth quarter.	
WWF	WWF UK: PIPAL	-								

TD	A _40040	T4		Yea	r II		C4-4	A -1-:	Dadaa
IR	Activities	Target	Q1	Q2	Q 3	Q4	Status	Achievements	Remarks
Cost share									
	System of rice intensification (SRI) training for local farmers	4					Completed	4	
	Developing Local Adaptation Plans	3					Completed	3	
3.2.3	Support to implement Community Adap	tion Plans							
	CAPA implementation with technical support from selected resource partners	143					On track	37 CAPAs implemented	The implementation of additional CAPAs is underway. 4 villages, who installed Improved Cooking Stove (ICS) as part of CAPA implementation, were declared as model villages for improved cook stoves in Gorkha.
	LAPA implementation	18					On track	preparation of 18 LAPAs ongoing	Will be implemented in the fourth quarter.
3.2.4	Build capacity at all levels and conduct v	ulnerability	y asse	ssmer	ıt			•	
	Workshop to mainstream and enhance CAPAs into LAPA process	9					On track	9	This activity will be completed after LAPAs are prepared in the fourth quarter
	Rapid assessment to identify vulnerabilities, groups/sites using underlying causes of poverty and vulnerability analysis (UCPVA) tools for FY 2014 planning	53					Completed	57 assessments completed	Poverty and vulnerable pockets/areas identified using UCPVA tools, which will be used for CAPA preparation next quarter and next year.
WWF	WWF UK: PIPAL								

IR	A ativitica	Towast		Yea	r II		Ctatura	A abiarram anta	Domonka
IK	Activities	Target Q1 Q2		Q3	Q4	Status	Achievements	Remarks	
cost share									
	Investigate the possibilities of establishing seed banks in TAL	1					Completed	1	
	Establishment of seed banks	1					Completed	Followed a training on climate adaptive horticulture	
3.3	Participatory and simplified system for v	ulnerabilit	y moni	itorin	ıg esta	blish	ied		
3.3.1	Design and field test a participatory and	simplified s	system	for v	ulner	abili	ty monitoring		
	Training and/or orientation for local bodies and community members	153					On track	11 events were organized this quarter. 225 community members participated in the events.	More community orientations will be organized in the fourth quarter after the groups start implementing CAPAs.
3.3.2	Implement the PM&E for vulnerability monitoring system	monitoring	by bui	lding	g capa	city (of the local au	thorities and CB	Os and institutionalization of
	Community review and reflection	85					On track	Preparations have started	This will be organized in the fourth quarter.
3.3.3	Monitor trends in climate variability and	l change at	landsc	ape l	evel				
	Monitoring of ecological support systems and ecosystems as they affect human adaptation	7					On track	4 corridor level studies have been conducted in TAL and the results used for 2014 Hariyo Ban planning.	Background study is underway and vulnerability will be assessed in 3 river basins in CHAL (Seti, Marsyangdi and Daraudi) in the fourth quarter.
3.4	Creation, amendment and execution of a	daptation p	olicies	and	strate	egies	supported		

IR	Activities	Target	Year Q1 Q2	Q 3 Q4	Status	Achievements	Remarks
3.4.1	Support CFUGs, FECOFUN and other C dialogues, and disseminate climate and a		ntions to conc	luct evide		lvocacy campaigns	s, participate in critical policy
	Establish, follow and strengthen Community Learning and Action Centers in priority communities to implement issue based advocacy	187			Completed	210 CLACs established and strengthened	The communities will be supported to solve issues raised in CLACs, and will also be used for campaigns
	Support CFUGs and other CBOs to conduct issue based campaigns on climate change issues	239			On track	30 campaigns organized	Out of the 30 campaigns, 11 were at the local level. More campaigns will be organized in the fourth quarter.
3.4.2	Support consultation on climate vulneral	ps, ethnic minority	groups and religious leaders				
	Support organization of conferences, consultations, engagements, tours, and exposure visits	7			On track	5 visits conducted	Support for Ministry of Science, Technology and Environment (MoSTE) to conduct regional consultations on National Adaptation Plan (NAP) is planned during last quarter.
	Provide support for climate change CSO working groups and other networks	1			On track	1	Engagement with Climate Change Network (CCN) is planned for National Adaptation Plan (NAP) consultations in the fourth quarter.
3.4.3	Support local authorities at district level	under prog	gram landsca	apes to int	egrate clima	te change adaptati	ion into existing development
	planning and disaster risk management	processes					
	Policy support to share CC related policies	1			Completed	1	The LAPA and CC policy shared in CAPA sites.
	Support local authorities to integrate CC into existing development planning by providing technical service from resource partners like Rupantaran, Resources Identification and Management Society (RIMS)	1			Completed	3 events on integrating CC into development plans organized	3 districts (Chitwan, Gorkha and Kaski) supported with 3 events on integration

Highlights of the key activities under this component are given below.

Sub IR 3.1: Government and civil society understanding of climate change vulnerability and gender-equitable and socially inclusive adaptation practices increased

<u>Training government and civil society representatives on climate change issues and gender-</u> equitable and socially inclusive adaptation practices (Activity 3.1.1)

Various activities were conducted during this quarter to increase understanding of climate change issues in government officials and civil society members.

During the reporting period, activities under this component helped to increase the understanding of climate change issues among government, CSO and community members. The sessions were very interactive and the participants shared their knowledge and experience. The completed included: activities 17 trainings/workshops climate change issues were conducted for government staff and civil society members in Mustang, Rautahat,



Figure 10 Women attending orientation on climate change, Kailali

Chitwan, Dhading, Gulmi, Lamjung, Syangja, Dang and Kailali districts, 12 training events on climate and gender were organized for community groups and CSOs and 21 workshops on climate change issues for CAMC in CHAL.

Mass campaigns for communities and students (Activity 3.1.2)

122 climate change awareness events were conducted in schools in Kanchanpur, Kailali, Bardia, Banke, Dang, Chitwan, Makwanpur, Parsa and Rautahat in TAL and Gorkha, Kaski, Dhading, Parbat and Gulmi districts in CHAL. 18 celebration events were completed by four partners in CHAL, TAL and Kathmandu. These covered issues concerning women, biodiversity and environment. The major focus on these events was climate change, its impacts, and mitigation and adaptation measures needed to address the adverse impacts of climate change.

68 climate change sensitization events were organized in Kanchanpur, Kailali, Bardia, Banke, Dang, Lamjung, Makwanpur, Syangja, Tanahu and Gulmi districts. The topics included basic concepts about climate change, the manifestations of CC in the local context, climate smart adaptive measures, and differential impact of climate change.

Building capacity of media to document and share learning on adaptation (Activity 3.1.3)

One training event on enhancing knowledge about climate change was conducted for media personnel in Dhangadhi. The training included 30 media personnel from 26 local and national media houses.

A radio program was broadcast for a week, from 26 April to 2 May 2013, on the theme of climate change and forest fire control. The program was broadcasted on the Ujyalo 90 Network. The Ujyalo network has links with more than 90 radio and FM stations across the country.

Climate adaptation research (Activity 3.1.5)

Three studies were implemented during the reporting period under this heading: 1) Landscape level vulnerability assessment, 2) Climate change impact on biodiversity in CHAL and TAL (also referred to in the Biodiversity section), and 3) Preliminary assessment of landslides in parts of CHAL.

The first study included background on infrastructure, community adaptation plans, and the CHAL rapid assessment, as well as information related to meteorology, demography and water resources. Initial findings of this assessment were shared and used for planning program activities in year 3.



Figure 11 Field practice on CAPA tools during ToT for LRPs on ICVCA and PMERL

The study on climate change and biodiversity showed most of the lower and mid hill forests in the tropical and subtropical zones are particularly vulnerable to climate change. However, the temperate montane and subalpine forests are more resilient. The study recommended that smaller patches of resilient forests in the lower subtropical zones should be identified and conserved to maintain north-south connectivity for ecosystem functions and services. The report will be finalized soon.

The third study assessed landslides in 5 sites in CHAL. This study provided recommendations for measures to protect against landslides through immediate measures such as vegetation plantation, drainage to maintain surface flow of water, and avoiding grazing and clearing of vegetation. Other recommendations include structural components such as gabion fill up, grade stabilization and gully control. The study recommended following the bioengineering approach, as it is low cost and helps to reinforce existing ecosystems, and is important for climate change adaptation. The three studies will be written up to document results, and shared with government officials and other stakeholders.

A total of 5,884 participants, including 1,749 women/girls, 187 Janajatis and 51 Dalits participated in the events planned under Activity 3.1. It is expected that through the implementation of these various awareness and training activities, there will be increased understanding of climate change vulnerability, and it will contribute to climate smart adaptation planning across landscapes and communities.

Sub IR 3.2: Pilot demonstration actions for vulnerability reduction conducted and expanded

<u>Design and field testing of integrated vulnerability assessment methodology in selected</u> <u>communities (Activity 3.2.1)</u>

There are not enough human resources for supporting assessment of climate vulnerability in communities and development of adaptation plans to address the issues related to climate change. So Hariyo Ban Program has emphasized capacity building of Local Resource Persons and other relevant people to enable them to conduct the planned activities.

Training on integrated climate vulnerability and capacity assessment (ICVCA) and participatory monitoring, evaluation, reflection and learning (PMERL) are the major events organized for capacity

development. Up to the end of second quarter, the Hariyo Ban Program had trained a total of 43 LRPs, government officials and civil society members who have been instrumental in the preparation of Climate Adaptation Plans of Action (CAPAs). As the Hariyo Ban program covers a large geographical area, there is increasing demand for these local resource persons. During this quarter, three training events on ICVCA and PMERL were conducted in Chitwan, Dhading and Kaski districts. A total of 80 LRPs, including 39 women, participated in the trainings. The objective of the trainings was to enhance the capacity of



Figure 12 LRP facilitating a vulnerability assessment in L iwangi Community, Banke

LRPs, and instill the knowledge and skills necessary for CAPA preparation. During the course of the training, the participants conducted

vulnerability assessments of two BZCFUGs. The LRPs will play a key role in the preparation of the CAPAs and their implementation. A profile of the Local Resource Persons trained is given in Annex 6.

Support for CAPA preparation and implementation (Activity 3.2.2 and Activity 3.2.3)

During this reporting period, a total of 98 CAPAs were prepared in Chitwan, Bardia and Kanchanpur districts. A total of 8,300 vulnerable households were identified, and they and their communities

devised a number of activities in the CAPAs to address these vulnerabilities. Major activities include plantation of tree species and bamboo, gabion check dam construction, biogas plant installation, improved cook strove distribution, bioengineering for landslide and river bank stabilization, conservation ponds, waste water utilization ponds, fire line clearing in the forests, health awareness activities, income generating activities, training on agriculture and livestock management, vegetable cultivation, formation of

agricultural groups and training, climate change sensitization activities, organic farming, pro-poor focused livelihoods programs, and wetland conservation.



Figure 13 Community involvement in CAPA preparation of Satyawarti "Ka" CFUG, Nawalparasi

CAPA Implementation Has Set A Model Village

Hariyo Ban has been working on climate change adaptation in Ghermu VDC, Lamjung for over a year. It works through Manaslu CFUG, which covers 131 households in Niuri, Chhichu, Khani and Ghermuphant villages, in wards 4, 5 and 9 of the VDC. To start with, people's awareness was raised on climate change issues and a participatory vulnerability assessment was conducted by the communities. Hariyo Ban staff facilitated the assessment which gathered information on climate change impact on ecosystem and communities. The assessment concluded that landslides, flood and loss of forest and agricultural land were the greatest vulnerabilities. This was followed by preparation of a community based adaptation plan through a series of participatory exercises. The plan aims to enhance capacity of vulnerable communities and ecosystems to adapt to the adverse impacts of climate change, with involvement of the 131 households as beneficiaries. The CAPA was endorsed by Manaslu CFUG during its general assembly held on 22 November, 2012.

A major source of livelihoods in the area is collection and marketing of Non Timber Forest Products (NTFPs) (Ban Lasun, Nirmasi) from the community managed forests. With climate change, water springs/sources are becoming less reliable and the NTFPs are growing scarce. So protecting forest resources was prioritized as one of the major adaptation activities. The communities identified and prioritized improved cook stove (ICS) support as a priority adaptation activity. These stoves are more efficient and so decrease fuel wood consumption, which helps to decrease pressure on forest resources. This in turn should result in healthier forests that provide greater



Local woman enjoying cooking in metallic ICS

protection against landslides, soil erosion, and loss of forest and agriculture areas. A metallic ICS was selected instead of a mud brick stove design, as the metallic stove gives better performance at high altitudes. More efficient use of fuelwood will increase resilience of both communities and ecosystem to climate change.

Of the 131 households, 129 installed ICSs. Hariyo Ban Program supported 62, and the remainder were supported by the Energy section of the VDC. The stoves were made available by the Alternative Energy

Promotion Centre at subsidized rates. Based on the results of a participatory well-being ranking exercise, stoves were distributed free of cost to poor and ultra-poor households, while middle class and well-off households paid a minimal charge (Rs. 1500 per stove for middle income and Rs. 2000 for well-off households).

The families have been using the new stoves for cooking daily, and report that they are more efficient than traditional stoves, reducing fuel wood consumption which will help restore and conserve their forest. They also reported a reduction in indoor air pollution, less cooking time and reduction in fire safety risk in the kitchen due to the design of the metallic stoves.



Western Regional Forest Director during declaration of ICS Model Villages

On April 23, 2013, in the presence of the Regional Director, Western Region Forest Directorate and other stakeholders, Manaslu CFUG declared Niuri, Chhichu, Khanibeshi and Ghermuphant villages as Model Improved Cooking Stove (ICS) Villages as 98 percent of the households in the Manaslu CFUG are using improved cook stoves.

During the last quarter, the Hariyo Ban Program provided support for implementation of the 9 CAPAs in Lamjung, Gorkha, Tanahun, Chitwan and Kanchanpur districts. During this quarter, support has been provided for an additional 37 CAPAs. Some of the activities undertaken during implementation of CAPAs include the following:

- One forest fire training conducted in Dahakhani VDC, Chitwan.
- 21 ICSs distributed in Farm Tole, Banke district.
- 4 villages in the Ghermu VDC involving 129 households declared ICS model villages
- 19 households installed ICSs in Rajdevi CFUG Gorkha; 10 plastic ponds constructed; and 10 gabion wire boxes received from District Soil Conservation Office, Gorkha
- Solar water pump installed in Sidhathani VDC, Tanahun district.
- Small irrigation maintenance support provided in Bhadaure and Chapakot VDCs in Kaski district
- 196 biogas plants installed in Jhalan VDC in Kanchanpur, and in Dhadawar and Neulapur VDCs in Bardia district.
- 62 ICSs installed by CARE in Manaslu CFUG of Ghermu, Lamjung. With this support, 4 villages (Neure, Chhichu, Khanibeshi and Ghermuphant) were declared Improved Cooking Stove (ICS) Model Villages.

Since implementation of CAPAs requires a huge amount of resources, support provided by the Hariyo Ban Program will not be adequate. Resource leveraging will be important as we forward, and hence links/engagement with relevant institutions will be promoted to encourage resource investment in the CAPAs.

Build capacity at all levels and conduct vulnerability assessment (Activity 3.2.4)

Altogether 8 rapid assessments were organized during this quarter with 232 participants. These assessments were carried out in Syangja in CHAL, and Dang and Banke in TAL. 647 households of four different communities in TAL were assessed; 438 were found to be vulnerable.

Sub IR 3.3: Participatory and simplified system for vulnerability monitoring established

<u>Design and field test a participatory and simplified system for vulnerability monitoring (Activity</u> 3.3.1)

A total of 65 government officials from VDCs and DDCs were trained in capacity building on VA and PMERL in 3 training events. Training aimed to impart knowledge and skills on these subjects, which will be instrumental for the development of climate change resilient sectoral plans.

Eight trainings on PMERL were organized for community members in Dang, Kailali, Kaski and Gorkha. 225 participants were trained, who gained knowledge and skills to monitor their adaptation plans.

Sub IR 3.4: Creation, amendment and execution of adaptation policies and strategies supported

Establishing and strengthening Community Learning and Action Centers (CLAC) Activity 3.4.1

Community Learning and Action Centers (CLACs) have been instrumental in increasing awareness, knowledge and skills of marginalized women and socially excluded people on various aspects including biodiversity conservation, natural resource management, climate change, women's rights, and governance. The Hariyo Ban Program has emphasized establishment and strengthening of the CLACs. In total, 204 CLACs were established and operated under the Hariyo Ban Program in Tanahu,

Syangja, Kaski, Gorkha, Lamjung, Makwanpur, Palpa and Gulmi in CHAL. Likewise, in TAL CLACs were established in Chitwan, Dang, Bara,



Figure 14 Pragatisil CLAC organizing mass campaign against harmful social norms and practices, Nawalparasi

Bardia, Kailali, Kanchanpur and Nawalparasi districts. A total of 5,205 participants are affiliated to these CLACs, among them 5,098 were women. The community people participating in CLACs gained knowledge issues such as adaptation planning, livelihoods, benefits from community managed forests, GESI, health and sanitation, and rights issues. Thirty such campaigns at the local and national level were organized with the issues identified by the groups.

Women as Change Agents

Hariyo Ban implemented a community learning and action center (CLAC) in Daulatpur-3, Laxmipur village, Bardia, in collaboration with Khaireni Mahila CFUG. A total of 25 women are affiliated to the CLAC. Previously, the women in the area were neither organized as a group, nor confident to raise their issues, and their participation in social developmental activities was very low.

As different topics were discussed in the CLAC, their knowledge about issues such as governance, CFD guidelines, health, sanitation, child rights, environment and education was enhanced. They gained self-confidence and started to get involved in community development affairs. For example, they led the ward-level sanitation committee and encouraged households to install and use toilets in their village. This has resulted in the declaration of Laxmipur village as an Open Defecation Free area. For the success of the campaign, the committee was awarded Rs. 3000.00 by the Nepal Red Cross Society, Bardia. Score Nepal/Social Service Learning Centre has provided an emergency tap to the committee.

The group decided to save the money received for snacks from Hariyo Ban and use it to build a one-meter bridge across the local stream. Now people can easily cross the stream especially children. They also made a significant contribution to forest conservation initiatives in local forest, and planted 30 tree saplings around the Khaireni Mahila CFUG building. They also constructed a 1500 m trench on the border of the CFUG in order to protect from encroachment and animal grazing and cleared invasive species from one hectare of forest.

As a result of the CLAC, the women are much more empowered to tackle local issues that concern them, including management of their local forest. They are also encouraging other women in community to actively participate in these activities.

Support to consultation on climate vulnerability and adaptation issues with women's groups and ethnic minority groups. (Activity 3.4.2)

During this reporting period, five exposure visits were conducted for community members to expose them to existing adaptation activities in Langtang (under the Sacred Himalayan Landscape program) and the Indrawati river basin. Two regional level consultations on NAP are planned, in collaboration with MoSTE and climate change network (CCN), for the fourth quarter.

5.3 Cross Cutting Interventions:

5.3.1 Gender Equality and Social Inclusion (GESI)

The National Trust for Nature Conservation has recruited Ms. Sikshya Adhikari Rana as Gender and Social Inclusion Officer. This indicates NTNC's increased commitment towards mainstreaming the agenda of gender equality and social inclusion in the Hariyo Ban Program, as well as other programs in the organization.

There is increasing engagement in policy discourse, as there are many new policies that are in the process of revision. The Ministry of Forests and Soil Conservation has invited the GESI Coordinator of the Hariyo Ban Program to provide preliminary inputs in the biodiversity strategy. Similarly, MoFSC is also in the process of assessing effectiveness of its GESI mainstreaming strategy with financial support from the Multi-stakeholder Forestry Program (MSFP). The Hariyo Ban Program will also provide support in effective implementation of the mainstreaming strategy by supporting orientation initiatives and collecting feedback.

Women Organizing for Change in Agriculture and Natural Resource Management (WOCAN) organized a women's leadership circle meeting on 24th May 2013 that has indicated a lack of clear and common gender perspective for providing policy recommendations. HIMAWANTI will lead the process of preparing policy recommendations from the gender perspective based on interactions with both grassroots and national gender experts from various fields. The Hariyo Ban Program will provide support to HIMAWANTI in this process.

The Hariyo Ban Program has been invited to share its gender equality and social inclusion mainstreaming experiences, providing the opportunity to support GESI mainstreaming within the program and beyond. Invitations from networks like the CSO REDD+ Alliance also indicate Hariyo Ban's comparative advantage to participate in different policy discourses.

Periodic meetings of the Gender Equality and Social Inclusion focal persons of USAID funded projects, namely the Suaahara Health for Life (H4L), Knowledge-based Integrated Sustainable Agriculture and Nutrition (KISAN), Sajhedari and Hariyo Ban Program, have been initiated. The first and second meetings were organized on 23rd May 2013 and 28th June in Suaahara and H4L offices respectively. These meetings are helpful in exploring areas of collaboration between programs. Hariyo Ban will contribute extensively in the process of creating online platforms for promoting knowledge sharing among the GESI contact persons.

Ms. Kine Valvik Mitchell, a Norwegian student from the University of Edinburgh, has supported the Hariyo Ban Program in exploring answers to questions on the barriers of leadership among Dalit and Janajati women through her four-week field study focused on five different CFUGs in Banke district. The study revealed that forcing women into decision making positions without proper leadership packages hampers their confidence and self-esteem. The study indicated that further assessment is

required in the field of gender based violence in the NRM sector, as well as the impact of migration on people engaged in conservation of NRM. It also focused on the need for systematic leadership development processes to be adopted for meaningful participation of women and socially excluded groups in decision making positions. The report will be finalized by the end of August 2013.

The concept of GESI in REDD+ training has been designed jointly in consultation with the REDD+

and GESI team members of the four consortium partners. The purpose is to provide consistent messaging in these training events. The objective of the training is to enhance capacity of CSO and concerned agencies working to empower women and socially excluded groups on concepts, policies and Nepal's initiatives on REDD+, developing a common understanding on gender equality and social inclusion dimensions in REDD+ interventions, and planning future



activities focused on GESI mainstreaming in REDD+. CARE Nepal organized mainstreaming

Figure 15 Participants in GESI training

GESI in REDD+ trainings for LRPs of CHAL (Kaski, Tanahun, Syangja) and of TAL (Banke, Bardia, Kailali, and Kanchanpur) in Pokhara and Nepalgunj, respectively. Altogether, 56 LRPs participated in the trainings, which included 37 women, 14 Janajati and 5 Dalit participants. Another training event was also organized by FECOFUN in this reporting period.

The GESI and M&E unit of the Hariyo Ban Program have jointly conceptualized the process of conducting rapid assessments of the representation of women and socially excluded groups in decision making positions of CFUGs. The rapid assessment process also evaluates budget allocation for livelihood promotion of poor women, Dalit and marginalized Janajatis, and the prevalence of governance practices such as PHPA and PWBR in these CFUGs. FECOFUN has been coordinating the process of collecting and analyzing information in close consultation with the GESI and monitoring teams.

Table 5: Summary of progress in gender equality and social inclusion

IR	Activities	Target	Year II		Status	Achievements	Remarks		
	CENDED FOLIALITY		Q1 Q1	Q2	Q3	Q4			
4	GENDER EQUALITY					TT .	D 4 4 1	1 1	
4.1	Gender equality and so	cial inclus	ion ma	ainstre	amed in	Hariy		<u> </u>	Ι
4.1.1	Mainstreaming gender equality and social inclusion strategy						On track	GESI assessment of four consortium partners has been completed as the preparatory process for developing GESI mainstreaming strategy. It was realized that there should be separate GESI assessment reports of the consortium partners. Process of sharing these separate assessment reports has been initiated and will be continued in the next quarter, maintaining confidentiality. It is anticipated that this process will contribute in facilitating institutional changes in strengthening GESI responsiveness.	Mainstreaming strategy will be finalized after incorporating final comments and suggestions in next quarter.
4.1.2	GESI knowledge sharing and capacity building events						On track	GESI Focal persons of USAID programs like Suaahara, H4L, Sajhedari, KISAN and HBP has initiated process of periodic meetings for exploring areas of collaboration and benefit each other from their experiences. HIMWANTI sub-award on leadership development of women leaders of other sectors has been approved and most of the interventions will be initiated from	

ID	Activities	Towast		Yea	ar II		Ctatus	A altiarram anta	Domonka
IR	Activities	Target	Q1	Q2	Q3 (Q4	Status	Achievements	Remarks
								the next quarter. GESI training manual for facilitating at community level is almost in completion stage. GESI illustrations based on content requirement of GESI training manual have been completed.	
4.1.3	GESI research and documentation						On track	Gender assessment on power dynamics has been initiated. Similarly, the conceptualization process of conducting differential impact of climate change has also been initiated. Kine Mitchell, University of Edinburgh has completed her internship regarding "leadership barriers of Dalit and Janajati women in Banke CFUGs".	Study findings will be shared in next quarter.
4.1.4	Coordination and networ	king: polic	y and	advoca	су				
a	Strengthen GESI network and government linkage for promoting GESI policy environment						On track	Continued relation building efforts with GESI focal person of MoFSC. HIMAWANTI concept on policy brief from gender perspective has been approved and initial discourses initiated.	
b	Advocacy and campaigns						On track	Efforts of raising CSO perspective in policy discourses has been continued and gender perspective based policy brief prepared from coordination of HIMAWANTI will be widely used from next quarter and beyond.	

IR	Activities	Toward		Yea	ar II		Status	Achievements	Remarks
IK	Activities	Target	Q1	Q2	Q3	Q4	Status	Achievements	Kemarks
4.1.5	GESI impact analysis						On track	Baseline survey on representation status of: women and socially excluded groups in CFUGs, practice of good governance tools like PGA, PHPA, PWBR; allocation of 35% for livelihood promotion of poor household has been initiated. Process of selecting consultants for conducting assessment on Gender Based Violence has been initiated.	assessment will be shared in next

Completed On Track Delayed

Cancelled

5.3.2 Improved governance:

This includes activities that are geared towards improving internal governance of the NRM groups and their interface with GLAs. Details of the activities are provided in the Biodiversity Conservation Component (sub-IR1.3).

5.3.2 Livelihoods improvement:

This includes support for poor forest user members of CFUGs to improve their livelihoods, establish green enterprises, and to leverage resources. Details of the activities are provided in the Biodiversity Conservation Component (sub-IR 1.4).

5.4 Overarching Themes and Activities

TAL strategy revision

During this quarter a core committee of concerned organizations (MoFSC, DNPWC, DoF, NTNC, FECOFUN, WWF, International Centre for Integrated Mountain Development (ICIMOD), *International Union for Conservation of Nature* (IUCN), USAID and MSFP) was formed by MoFSC to revise the TAL Strategy. This marks the start of the TAL strategy revision process.

Learning strategy

During this quarter we refined the learning strategy and learning question matrix, working with the learning consultant and consortium partners. Some of the learning activities are already in progress. We are working to integrate the learning strategy into next year's work plan, when the strategy will be in full swing.

Overarching reviews and exploration of key issues

Infrastructure development. This quarter the infrastructure assessment in TAL and CHAL continued with field visits to infrastructure sites by the consultant. In the next quarter a national level consultation meeting will be organized with MoSTE and other national stakeholders, and then the consultant will finalize the report. Results of the study are already being incorporated into next year's work plan.

Coordination

We continued to collaborate closely with various donors and programs this quarter. We are in regular contact with the Multi-Stakeholder Forestry Program to ensure complementarity geographically and programmatically, and to share approaches, results and lessons. We continue to participate in the network of USAID funded programs which includes Feed the Future-Kisan, Health for Life, Suaahara and the Sajhedari Bikaas projects, to investigate cross-sectoral programmatic linkages and opportunities for collaboration, and share experiences and advice. Last quarter Sajhedari Bikaas provided training to FECOFUN and NTNC staff members on conflict sensitivity, which was well received. We continue to collaborate with other donors and projects working in similar fields to Hariyo Ban. Coordination with GoN continued during the last quarter, as did routine internal consortium coordination.

5.5 Monitoring and evaluation

A number of activities were conducted this quarter, including: M&E orientation for consortium partners and grantees; landscape level review, reflection and planning meetings; M&E orientation and compliance training, and progress report preparation; database automation work; and finalization of M&E plan including indicator reference sheets.

Landscape level review, reflection and planning meetings

Two landscape level review, reflection and planning meetings of the Hariyo Ban Program were conducted in TAL and CHAL. Representatives from the Hariyo Ban core team and consortium partners participated. The objectives of the meetings included:

- Review year 2 progress (October 2012-May 2013) at the landscape level
- Draw key lessons to inform the Year 3 annual planning process
- Identify key/emerging issues and actions for smooth program implementation
- Compare target outputs of key indicators with the planned outputs from the annual work plan
- Prepare draft year III Annual Work Plan

Overall progress of the Hariyo Ban Program was reviewed and discussion on critical issues, challenges and opportunities was held. The annual work plan for year 3 was based on information concerning threats to biodiversity, drivers of deforestation and forest degradation, and climate vulnerabilities as well as opportunities for REDD+ and other payments for ecosystem services. The M&E team members provided guidance and suggestions for results based planning during the planning sessions.

River Basin level Review and Reflection Meeting:

A river basin level review and reflection meeting was conducted in Daraudi river basin on 15 May 2013. The objective of the meeting was to review the progress of the Daraudi river basin in year two, and to document the issues, challenges, opportunities and lessons learned. The meeting also identified the status of addressing threats to the Daraudi watershed, and shared the plan for the next quarter. Representatives of all four consortium partners participated in the meeting.

Cluster Level Coordination Committee (CLCC) Meeting

During this reporting period, five cluster level coordination committee meetings were held in TAL, and included the participation of 75 people (63 male and 12 female).

Joint Monitoring Visit to CHAL

A joint monitoring visit by the Regional Forest Director and Hariyo Ban Program Consortium Partners was organized in CHAL during 22-26 April 2013. The main objectives of the visit were to observe and monitor field activities implemented through the Hariyo Ban Program, interact with the field teams and the communities to discuss realities on the ground, strengthen joint efforts, and discuss future strategies and actions. The Regional Forest Director, two undersecretaries, WWF CHAL Field Coordinator, CARE Team Leader and the CHAL M&E Assistant participated. The team visited Chame in Manang; Manaslu CFUG in Ghermu VDC, Lamjung; Dhodre CFUG of Gorkha Municipality, Gorkha; and Jumdanda Jhapri CFUG in Bandipur VDC, Tanahun. During the Visit, Dr. Rajan Pokhrel, Regional Forest Director, declared 3 wards of Ghermu VDC as model villages with improved cooking stoves.

District Level Joint Monitoring Visit

A joint monitoring visit was organized on 27-28 May, 2013 at Gorkha with representatives from Hariyo Ban consortium partners, DFO, DSCO, DDC, major political parties and media. The objective of the joint monitoring visit was to review the sisnu powder production enterprise, and to discuss Hariyo Ban Program interventions with district stakeholders. The group observed Community Learning and Action Center (CLAC), Community Adaptation Plan of Action (CAPA), Sisnu powder enterprise, and biogas installation. Additional Hariyo Ban activities were also discussed in the field.

Activity Monitoring

Biogas plant monitoring visit:

During this reporting period, the status of biogas plant installation from Year I and Year II was monitored in Kaski, Tanahu, Lamjung and Gorkha districts as part of a regular monitoring visit. The monitoring visit was conducted on 24-31 March 2013. The report from the monitoring visit included observations and recommendations, and was shared with relevant Hariyo Ban Program staff.

Forest fire management training monitoring visit:

The field monitoring of 25 participants of the forest fire management training, which was held on 2-6 April 2013, was conducted on 14 May 2013 in Jumdanda Jhapri CFUG of Bandipur VDC, Tanahun. The objective of the monitoring visit was to monitor the outputs and outcomes of the forest fire management training, and to ascertain the status of the equipment provided. The team found that the trainees needed support from the network of CFUGs nearby.

M&E Orientation training to partners

Participatory planning, monitoring, evaluation and reporting and proposal writing training

A 3-day training was conducted on 21-23 March 2013 to enhance the understanding of participatory planning, monitoring, evaluation, reporting and proposal writing among the partner CFCCs of TAL and field staff team at Dhangadhi. The overall objective of the training program was to improve the monitoring and reporting capacity of the partner CFCCs and to promote effective management of

informational resources. The training ended with action plans for the respective CFCCs to improve the implementation programs.

M&E and compliance orientation

Three orientation events on M&E and compliance were organized in Dhangadhi on 12-13 May 2013; 11-12 May 2013 in Sauraha, Chitwan; and 6-7 June 2013 in Nepalgunj, Banke. The participants were from organizations including government agencies, CBOs, and CFCCs. The orientation focused on basic concepts of



Figure 16 M&E specialist facilitating the M&E orientation in Dhangadhi, Kailali

M&E, results chains, data recording and management, and Hariyo Ban compliance.

Database automation work: A consultant has been hired and is working on designing software for database management. The work is expected to be completed by the end of September.

Table 6: Summary of progress in Monitoring and Evaluation

IR	Activities	Location	Towast	Target Year II		Status	Achievements	Remarks		
IK	Activities	Location	Target	Q1	Q2	Q 3	Q4	Status	Acmevements	Kemai Ks
1	Capacity building activities pertinent to M&E for Hariyo Ban Program staff, line agencies and CBOs to enhance participatory M&E systems and enhance expertise in M&E, staff capacity, orientation on software etc.	CHAL, TAL and Center	24 events					On track	A total of seven events of capacity building activities including four events of M&E orientation and three events of M&E orientation and compliance training were conducted in CHAL and TAL.	
2	Review and reflection of progress and achievements, lessons learned and issues and challenges at various levels - district, corridor, landscape	CHAL, TAL and Center	27 events					On track.	Six events of review, reflection and planning meetings of the Hariyo Ban Program were conducted in TAL and CHAL at landscape level, cluster level, central level and river basin level.	Due to heavy pressure in field implementation of activities, review reflection meetings were merged with regular coordination meetings and with planning meetings.
3	Learning management	TAL, CHAL and Center	1 learning strategy and action for Hariyo Ban					On track.	Learning strategy sharing workshops have been planned for early next quarter. Drafting learning strategy including learning questions was shared with partners.	
4	Database management including purchasing of software and staff orientation	TAL, CHAL & Center	1 Database software					On track	Consultant hired and software development work is on progress. Expected to be completed by end of September.	

IR	Activities	Activities Location Target Year II			Status	Achievements	Remarks			
IK	Activities	Location	Target	Q1	Q2	Q 3	Q4	Status	Acmevements	Kemai Ks
5	Research and case studies including outcome monitoring	TAL & CHAL	outcome monitorin g 150 LRPs mobilizat ion for informati on gathering					On track	Consultation meetings with partners planned.	Because of delays in activity implementation, the initial plan has been changed and will be conducted in the last quarter.
6	Monitoring visits by core partners and stakeholders including senior officials from government line agencies	TAL & CHAL	51 monitorin g visits					On track	A total of fifteen central level, landscape level and district level monitoring visits were organized which was participated by core partners and stakeholders.	
7	Support planning of Hariyo Ban at various levels	TAL & CHAL	11 planning events					On track	Representatives from Hariyo Ban Program participated in 4 regional level planning meetings organized by the Ministry of Forests and Soil Conservation in Dhangadhi, Surkhet, Pokhara and Hetauda. Besides, two events of landscape level planning meetings were conducted in TAL and CHAL.	Review reflection and planning meetings were merged at landscape and cluster level.

Completed On Track Cancelled

5.6 Communications

Increasing the capacity of media personnel in producing environmental news

One of the communications objectives is to provide knowledge and influence attitudes and behavior of targeted audiences to reduce vulnerability to climate change and threats to biodiversity. During this reporting period, three different events were organized to increase the capacity of media personnel. These events included a media workshop, field visits, and a sharing session on Environment Day. They targeted key national journalists who produce environmental stories for the general public.

Media Workshop on Earth Day

Objective of the workshop: To encourage established Nepali journalists to produce more in-depth environmental news and help them to see a broader socio-political picture while encouraging them to connect the dots between the local, national, and global context.

The media is a powerful tool capable of influencing the attitude and behavior of people. The two-day workshop was organized on 22 and 23 April, 2013 in Kathmandu, and sought

to provide information about Hariyo Ban and conservation for people in the media. The event was organized by WWF Nepal, Hariyo Ban Program in collaboration with USAID.



Figure 17 Mr. Navin Singh Khadka, Environment Reporter, BBC skypes with participants in Kathmandu dduring the Earth Day workshop

The event was attended by 12 journalists from prominent Nepali print, audio and online media. It included prominent speakers such as Kate Sheppard, an award winning environmental journalist from the USA; Navin Singh Khadka, BBC Environment Reporter; Pitamber Sharma, former Vice Chair of National Planning Commission of Nepal; Dr. Krishna Chandra Paudel, Secretary of the Ministry of Forests and Soil Conservation; Anil Chitrakar, Internationally recognized Energy Planner; and Mangal Man Shakya, Journalist and Executive Committee Member of Wildlife Watch Group.

During the program, speakers and participants discussed issues such as the politics of federalism; environmental and natural resource policies in the Parliament and Constituent Assembly; long form writing on environmental issues; REDD; and Nepal's vision of Forestry for Prosperity. After the workshop, the journalists travelled for four days to field sites of the Hariyo Ban Program.

Media field trip to Central and Western TAL

Objective of the field visits: To familiarize journalists of print, online and radio with issues and realities of the Terai Arc Landscape and the ongoing work of Hariyo Ban Program and WWF Nepal for news stories. To help them learn about the country's key environment issues that environment organizations and local communities are facing so that they can see a broader socio-political picture and connect local, national, and global context in their field stories.

The field visit to Central TAL occurred from 5 to 7 May, 2013 and Western TAL on 23 to 26 May, 2013. Each exposure visit included journalists and representatives of USAID, WWF Nepal and Hariyo Ban. In Central TAL, the team visited working sites such as Namuna Buffer Zone Community

Forest (CF), Seti Devi CF, Rani Khola CF, Kumrose biogas village, Chitwan National Park and Patihani Buffer Zone User Committee. The participants gained insights on wetland and grassland management, biogas, electric fencing, community based anti-poaching units (CBAPUs), ID-based rhino monitoring, and human-wildlife conflict.

In Western TAL, the team visited a solar-fenced area at Bhimapur; homestay in Dalla; community based anti-poaching unit (CBAPU) in Karmala; Karnali River Corridor; and Layakpur biogas village. The team learned about the formation of CLACs and the implementation of Community Adaptation Plans of Action in Dhanuwa Phanta; blackbuck translocation at Hirapur Phanta; and swamp deer conservation in Shuklaphanta Wildlife Reserve. Through the visits, the journalists gained insight on human wildlife conflict and mitigation measures; benefits of the usage of biogas and carbon trade; the concept of Reduced Emissions from Deforestation and Forest Degradation Plus (REDD+); species conservation; need of local community participation in conservation; the concept of ecotourism and alternative livelihoods options. Both the field visits were followed by a debriefing session.

World Environment Day Program

Objective of the program: To discuss investigative environmental reporting in a national and international context, share various stories produced from the field visits among stakeholders and students, and continue to help environmental reporters connect local issues to broader themes.

On 5 June 2013, Hariyo Ban, WWF Nepal and USAID organized a program for World Environment Day. 83 people participated, including consortium partner representatives, media personnel, students of forestry and environment, and Hariyo Ban Program student grantees.

The event concluded the series of events for the 12 selected journalists that had started with the Earth Day workshop. The journalists shared various stories produced from the field visits. They discussed the process of story collection and challenges faced while compiling the stories. The facilitators helped the audience to understand the issues raised by the journalists, and helped to connect these issues to larger socio-political issues and global context.

During the program, recognition letters were also handed out to students receiving student research grants from the Hariyo Ban Program. Letters of appreciation were also awarded to journalists who participated in the workshop and subsequent field visits. The Hariyo Ban Program announced these journalists as Hariyo Ban Champions, and will be working in close collaboration with them in the near future.

Branding and marking orientation

Workshops were conducted on 20 June, 2013 in Dhangadhi and 24 June, 2013 in Chitwan on branding and marking for consortium partners and sub-award recipients, and also to develop sample banner templates for common activities and sites in the Terai Arc Landscape (TAL). 29 people participated in Dhangadhi and 25 in Chitwan.

Recording of International Women's Day Program winners

Complementing the global theme of the 103rd international Women's Day, "A promise is a promise: Time for action to end violence against women", the USAID funded Hariyo Ban Program organized a campaign on the theme "Amplifying unheard voices of women leadership in conservation and climate change" on March 08 2013. The campaign focused on raising voices from the local level to the

national, on best practices and challenges faced by women active in natural resource management through their inspiring stories via songs and poetry. The winners of the song and poetry competitions were Ritu Lama and Uday Nepali from song category and Basanta Subedi and Jayananda Joshi from poetry category. Their original creations were recorded and will be aired via national radio and local FMs.

Production of outreach materials

Objective: In line with the Hariyo Ban Program communications strategy, one of the chief objectives of communications is to document and share Hariyo Ban Program successes, lessons learned, and best practices.

The Hariyo Ban Program is moving forward with the production of publications and reports. Recently, the Hariyo Ban Program produced the following briefing papers:

- ✓ Tool 1: Governance Public Hearing and Public Auditing (English)
- ✓ Tool 2: Governance Participatory Well-Being Ranking (English)
- ✓ Tool 3: Governance Participatory Governance Assessment (English)
- ✓ Climate Change Promoting Climate Change Adaptation in Nepal (English)
- . In addition, various reports and studies are being published, including:
 - ✓ Chitwan Annapurna Landscape (CHAL) Rapid Assessment report
 - ✓ CHAL Biodiversity Report
 - ✓ CHAL Drivers of Deforestation report
 - ✓ Training Needs Assessment Report
 - ✓ CAPA Preparation Guidelines
 - ✓ Gender and Social Inclusion (GESI) Training Manual
 - ✓ Feasibility study for reintroduction of wild water buffalo and swamp deer in Chitwan
 - ✓ Feasibility study for reintroduction of rhinoceros in Bardia's Babai valley
 - ✓ Tool 1: Governance Public Hearing and Public Auditing (Nepali)
 - ✓ Tool 2: Governance Participatory Well-Being Ranking (Nepali)
 - ✓ Tool 3: Governance Participatory Governance Assessment (Nepali)
 - ✓ Climate Change Promoting Climate Change Adaptation in Nepal (Nepali)

Table 7: Summary of progress in Communication

SN	Activities	Target		Yea	r II		Stat	ne	Achievement	Remarks
514	Activities	Target	Q1	Q2	Q3	Q4	Stati	us	Acmevement	Kemarks
	ncilitate the understanding of the Hariyo Bar eve Hariyo Ban Program objectives	n Program	and to	o influ	ence 1	the kn	owledge, attitud	es and behavi	or of key audiences	to better
1	Organize events around specific calendar days and campaigns to draw media attention highlighting Hariyo Ban activities of all four consortium partners						On Track	Earth Day, W Day celebrat	Vorld Environment ed	
2	Create a comprehensive, up-to-date and functional website for information sharing						Delayed			Awaiting approval from USAID
3	Form new partnerships and programs for joint communication with different organizations, including media						On Track	FM for a clir program. Par Conservation	vith Sagarmatha nate change tnership with n Information IN) underway.	
4	Produce outreach communication materials (print, audio/video etc.) including briefing papers on key concepts and initiatives in the context of the Hariyo Ban Program						On Track	have been pr	apers in English oduced, Nepali ers and reports	
5	Develop internal communication tools to communicate about the Hariyo Ban Program							newspaper es Ban Dropbox	eekly updates and stablished. Hariyo s being used for ang among partners.	

6. WINDOWS OF OPPORTUNITY

The Windows of Opportunity funds unbudgeted innovative activities arising at short notice, with potential to make a big difference to achieving Hariyo Ban objectives.

During the reporting period the following previously funded projects made progress:

- Field work for WWF/NTNC's collaborative project with the Government of Nepal in first transboundary survey of the tiger population and its prey in the Terai Arc Landscape is complete, and results are being analyzed
- Dalit Alliance for Natural Resources (DANAR)'s Assessment of Dalit inclusion in community based forest management of CHAL and TAL in 3 districts of Nepal is ongoing

No new funds were awarded from Windows of Opportunity (WOO) this quarter. At the end of the last quarter USAID decided to completely restructure the Windows of Opportunity. The reorganization will result in separate WOO funds: one for GoN, and one competitive fund for civil society for which Hariyo Ban resource partners are eligible to apply but not consortium partners. The WOO criteria have been revised to reflect this, and are being discussed and finalized. Funding from the original WOO budget has been allocated to the two funds, and in addition some funding was backed out of WOO to core Hariyo Ban, to cover remaining activities in the WOO pipeline. By the end of the quarter two of these had been awarded:

- International Development Enterprises (iDE): Innovative climate change resilient income opportunities for community forest user groups and smallholder farmers;
- HIMAWANTI Nepal: Protecting women's rights in natural resource management

Three urgent activities in the WOO pipeline were in the meantime funded by the consortium with other funds:

- Bird Conservation Nepal: Ornithological survey of Manaslu Conservation Area
- Center for Rural Technology, Nepal: Piloting of rocket stoves for reducing carbon emissions and conserving forests
- Mercy Corps: Building capacity for disaster risk reduction to increase resilience of communities and ecosystems.

Small Grants

1. Student Research Grants support Bachelor and Master's level students enrolled at institutions in Nepal and in other parts of the world. These grants allow students to undertake research projects as a requirement for partial fulfillment of their academic degrees in Hariyo Ban's geographic and thematic areas. While the program will help to fill gaps in knowledge in Hariyo Ban themes and landscapes, it will also play a vital role in capacity building, helping grantees to take their careers to the next level, and promoting sustainability of Hariyo Ban's approach in the future.

A total of 22 students were provided grant support for conducting their thesis research. Out of this number, ten are female students. Among these, 14 are Bachelor level students and eight are undertaking Master's degree courses. 13 of the studies will be conducted in TAL, and nine will be conducted in CHAL. Ten studies are related to IR 1 Biodiversity Conservation, two studies are

related with IR 2 Sustainable Landscapes, and two with IR3 Climate adaptation. Eight of the studies are related to GESI, governance and livelihoods.

2. Community-based grants aim to enhance leadership and networking competency of women, Dalits, Janajatis and socially excluded groups in biodiversity conservation and climate change initiatives. These grants also support locally initiated conservation and sustainable development models and approaches. This will ultimately lead to building the capacity of grassroots organizations to access and leverage external resources for conservation and sustainable development activities.

Proposals were called for through Hariyo Ban consortium and implementing partners. A total of 15 proposals (14 from TAL and one from CHAL) were received by the 15 May deadline, and are in the final phase of the review and selection process.

7. INITIAL ENVIRONMENTAL EXAMINATION

During this quarter a consultant hired for preparation of Framework Environmental Mitigation and Monitoring Plan (FEMMP) visited sites in TAL and CHAL where activities identified with potential negative impacts, termed as Negative Determination with Condition (NDC), were implemented in the first two years of the Hariyo Ban. The consultant then prepared a draft report, and undertook consultation with the Hariyo Ban partners. Hariyo Ban Program shared the report and FEMMP matrix with USAID. The FEMMP report was then finalized (Annex 7).

Assessment of the Hariyo Ban Program activities showed that the majority of them have no negative environmental and social impacts. Out of the 41 activities classed as NDC, potential negative impacts were found to be significant for only three activities: biological control of water hyacinth; preparation of community adaptation plans and local adaptation plans; and at some sites in CHAL the biogas companies did not perform according to national standards or show accountability to the households installing biogas. To address observed and potential issues in biogas a table outlining issues, possible solutions and responsibilities was developed. All four consortium partner organizations are committed to follow the table and implement mitigation measures to ensure that future installation and operation of biogas units do not result in any significant negative environmental or social impacts, and to mitigate for past impacts.

In the next quarter, Hariyo Ban will provide training to all consortium partners in identifying, mitigating, monitoring and reporting adverse environmental impacts. The FEMMP will be integrated in the third year annual work plan, and Environmental Mitigation and Monitoring Plans (EMMPs) will be prepared for ensuring environmental compliance of each site-level NDC activity in the field. For the previous years' activities, retrospective mitigation will be done if any significant negative impacts are identified.

8. MANAGEMENT REPORT

This quarter saw a marked acceleration of activities in the field, as all consortium partners took advantage of the remaining dry season. WWF's activities in particular accelerated after issuing many subawards to partner organizations in the previous quarter. Policy work also picked up somewhat.

This quarter saw several large events celebrating early Hariyo Ban supported achievements, including CBAPU support, electric fencing, and media training.

Some of the biogas work was delayed this quarter, first as language on the biogas process was agreed with USAID for attachment to future subawards funding biogas, and then when GoN in the meantime raised biogas subsidies, necessitating renegotiation of the subaward with AEPC. No awards were made through Windows of Opportunity this quarter as it was put on hold while it was completely restructured by USAID. Several activities that had been in the WOO pipeline were transferred to core Hariyo Ban and subawards were issued for some of them (see WOO report).

By now we have a much better collective understanding of the comparative advantages of each consortium partner, as well as the synergies and complementarities in the consortium. Our Hariyo Ban experience to date has given us a good insight into the opportunities and challenges in the two landscapes and at national level. During this quarter we have been analyzing the situation and refining our strategic approach for the remaining three years of Hariyo Ban, which will be more focused geographically and activity-wise on tackling priority threats, drivers and vulnerabilities, and on making use of opportunities, for example for REDD+. We will have a greater focus on leveraging and delivering results at different levels, and on building sustainability into the program. This will be outlined in detail in the third year work plan.

Staffing

Livelihood Specialist Mr. Jagadish Kuikel (WWF) (Hariyo Ban core team); M&E Officer Ms. Shweta Dhoubhadel (CARE Nepal); GESI Officer Ms Sikshya Adhikari (NTNC); Ms Srijana Baral (WWF Pokhara office); and other staff joined Hariyo Ban during the reporting period. Mr Kuldip Paudel (Climate Change Adaptation Specialist) left Hariyo Ban and is being replaced by Mr Man Bdr Biswakarma. An updated list of the Hariyo Ban Program staff is given in **Annex 8.**

9. OPERATING ENVIRONMENT

The political environment remained largely calm during the reporting period, apart from a few strikes which held up some activities temporarily. The election of the Constituent Assembly has been proposed for November 19, 2013. A large number of political parties (139) have registered with the Election Commission and voters are flocking to registration centers. The political situation is still fluid, but the main political parties are focusing their energy on the election, which is likely to be held. Hopefully this election will provide the opportunity to prepare a new constitution for the nation.

Due to favorable rainfall patterns during this period, there has been a reduction in electricity outages, which has benefitted people in certain areas as well as the consortium partners and core team. Due to early and good monsoon this year, people in the villages are busy with rice planting activities. This has slightly affected field based activities and some of them have been postponed till the rice plantation season (till end of July) is over. Cases of gender-based violence in Nepal are receiving more attention, specifically with respect to the beating and physical assault of women who are accused of being witches. Impunity against such crimes is widespread and the situation remains unpredictable. The Hariyo Ban Program will continue to assess these situations, and will be prepared to pursue the best strategy that maximizes the impact of the Program.

ANNEXES

Annex-1 Working Districts and VDCs/Municipalities of the Hariyo Ban Program

Hariyo Ban Program coverage in TAL

Corridor/bottleneck/ basin/watershed	District	VDC/municipality	Remarks
Kamdi Corridor Banke National Park (BaNP)	Banke	Baijapur, Basudevpur, Binauna, Fattepur, Kachanapur, Kamdi, Mahadevpuri, Manikapur, Kohalpu and Phattepur	10 VDCs
PWR	Bara	Amlekhjung, Bharatgang, Nijgadh, Ratanpuri, Sigaul and Simara	6 VDCs
	Bardia	Bardia, Bhimapur, Daulatpur , Dhadawar, Gola, Manau, Neulapur, Patabhar, Rajapur, Shivapur, Suryapatuwa and Thakurdwara	12 VDCs
Barandabhar Corridor	Chitwan	Ayodhayapuri, Bachhauli, Bagauda, Dahakhani, Gardi, Gitanagar, Jutepani, Kabilas, Kumroj, Mangalpur, Padampur, Pathihani, Piple, Shaktikhor and Siddhi Bharatpur and Ratnanagar Municipalities	15 VDCs 2 Municipalities
Kamdi	Dang	Bela, Dhikpur, Duruwa, Gadhawa, Gangaparaspur, Gobardiha, Goltakuri, Hulwar, Lalmatiya, Panchakule, Phoolbar, Rajpur, Tarigaun and Urhari Tulsipur and Ghorahi municipalities	14 VDCs 2 Municipalities
Karnali Corridor	Kailali	Baliya, Chuha, Dhansinghpur, Dododhara, Durgauli, Garespur, Narayanpur, Patharaiya, Sugarkhal and Thapapur Tikapur Municipality	10 VDCs 1 Municipality
Brahmadev / Laljhadi Corridor	Kanchanpur	BaiseBichuwa, Daiji , Dekhatbhuli, Geta, Jhalari, Krishnapur, Raikawar Bichuwa, Shankarpur and Suda Bhimdattanagar Municipality	9 VDCs 1 Municipality
Nijgadh- Chandranigahapur/ Parsa -Bagmati	Makawanpur	Basamadi , Bhainse, Churiyamai, Daman, Gadi , Handikhola, Manahari , Padampokhari and Palung Hetauda Municipality	9 VDCs 1 municipality
Kaligandaki/Baranda bhar Corridor	Nawalparasi	Agyauli, Amarapuri, Deurali, Devchuli, Dhaubadi, Kawasoti, Maker, Mukundapur, Naram, Narayani, Pithauli, Ratanpur, Ruchang, Shivamandir, Sunwal and Tamasaria	16 VDCs
Parsa -Bagmati	Parsa	Bagbana, Biruwaguthi, Harpur and Maduwanmatho	4 VDCs
Nijgadh- Chandranigahapur Parsa –Bagmati	Rautahat	Chandranigahpur, Chapur, Dumariya, Judibela, Kanakpur, Laxmaniya, Paurai and Rangapur	8 VDCs
BNP	Surkhet	Hari Harpur, Lekhparaju and Taranga	3 VDCs
In TAL, Hariyo Ban Pr	ogram has worl	ked in 116 VDCs and 7 municipalities of 12 districts.	

Hariyo Ban Program coverage in CHAL

Corridor/bottleneck/ basin/watershed	District	VDC	Remarks
Trishuli/Budi Gandaki	Dhading	Benighat, Dhusa, Gajuri, Jogimara, Kumpur and	6 VDCs
		Salang	
Daraundi River	Gorkha	Bihi, Chhaikampar, Chhoprak, Chumchet, Deurali,	25 VDCs
Corridor		Gankhu, Ghyachowk, Jaubari, Khoplang, Lakuribot,	1 Municipality
		Lho, Masel, Mirkot, Muchok, Nareshowor, Prok, Samagaun, Saurpani, Shreenathkot, Simjung, Sridibas,	
		Takukot, Takumanjh, Taple and Warpak, Gorkha	
		municipality	
Kaligandaki	Gulmi	Gaidakot, Hastichaur and Parmari	3 VDCs
		Tamghas Municipality	1 Municipality
Seti River Corridor /	Kaski	Arbabijaya, Bhadauretamagi, Balham, Bharatpokhari,	21 VDCs
Sukhaurakhola Sub-		Chapakot, Dangsing, Dhikurpokhari, Dhital,	2
Watershed		Ghandruk, Hemja, Kaskikot, Kristinachnechaur,	Municipalities
		Lamachaur, Lumle, Majhthana, Pumdibhumdi,	
		Puranchaur, Salyan, Sarangkot, Sardikhola and Thumakodanda Pokhara and Lekhnath Municipality	
Marsyangdi River	Lamjung	Archalebot, Bahundanda, Bajhakhet, Beshishahar,	20 VDCs
Corridor	Lamjung	Bharte, Bhoje, Bhoteodar, Bhulbhule, Chandisthan,	20 VDCs
Corridor		Chiti, Gaunsahar, Ghermu, Hiletaksar, Karaputar,	
		Kunchha, Mohariyakot, Nauthar, Sundar Bazaar,	
		Tarkughat and Udipur	
ACAP	Manang	Chame	1 VDC
ACAP	Mustang	Ghasa, Jomsom, Kagbeni and Marpha	4 VDCs
Trisuli River Corridor	Nuwakot	Ghyangfedi	1 VDC
(Langtang National			
Park, Buffer Zone			
area)			4.475.0
Kaligandaki	Palpa	Bhairabsthan, Darlamdanda, Dhovan and Galda,	4 VDCs
IZ .1' 1 .1 '	D. 1	Tansen Municipality	1 Municipality 3 VDCs
Kaligandaki Trisuli River Corridor	Parbat	Arthardandakharka, Chitre and Ramjadeurali Syafru	1 VDC
	Rasuwa	Syairu	1 VDC
(Langtang National Park, Buffer Zone area)			
Kaligandaki	Syangja	Aarukhola, Arjun Chaupari, Bagefatake, Bhatkhola,	9 VDCs
Kangandaki	Syangja	Jagtradevi, Pauwegaude, Phedikhola, Setidovan,	1 Municipality
		Thuladihi and Wangsing Deurali	
		Pulatibazar municipality	
Seti River Corridor /	Tanahun	Anbukhaireni, Bandipur, Barbhanjyang , Basantapur,	23 VDCs
Sukhaurakhola Sub-		Bhanu, Bhimad, Chhang , Deurali, Devghat,	1municipality
Watershed		Dharampani, Dhorphirdi, Dulegauda, Ghansikuwa,	
		Jamune, Kahu Sivapur, Keshabtar, Khairenitar,	
		Khaireni, Manpang, Phirphire, Pokhari Bhanjyang,	
		Risti and Tanahunsur	
Y	D :	Vyas Municipality	CYYAY
In total, Hariyo Bar	n Program ha	s worked in 121 VDCs and 7 municipalities of 13 districts	s in CHAL.

Annex-2 Results of CHAL watershed level assessment of biodiversity threats and drivers of deforestation/forest degradation

Result from Daraundi sub-watershed



Result from Marsyangdi watershed



Result from Seti watershed

	Threats \ Targets	Leopard (c	Forest (incl. rho	Orchids	Rivers (water	NTFPs/MAPs	Climate Sma	Grassland an	Wetlands	Birds	Agriculture Terr	Summary Threat Rating
	High dependency in forest resources		Low	Low		Medium		Low				Low
	Forest fire	Low	Low	Low		Medium		Low				Low
1	Disaster - Landslide		Low	Low	Low	Medium	Low				Low	Low
	Pest and Diseases in Sisoo		Medium									Low
	Illigal Harvest		Low	Low		Medium						Low
	Poaching	Medium	_							L		Low
	Shifting Cultivation		Low	Low		Low		Low				Low
	Unsustainable Fishing				Low				Low			Low
١	Unplanned Infrastructure - High		Medium									Low
	Encroachment		Medium		Medium			Low	Medium			Medium
	Invasive species		Low			Medium		Low	High		Medium	Medium
	Excessive Grazing		Medium			Low		Medium			Low	Medium
ı	Infrastructure - Hydropower and		Medium		Medium							Medium
	Unsustainable Sand and Gravel mining		Medium		Medium				High		Medium	Medium
	Sewage and Solid Waste Management				High				Medium		Low	Medium
	Unplanned infrastructure - roads		Medium		High		Medium		High		Medium	High
	Increasing temperature		Medium	Medium		Medium		Medium	Medium	ні	High	High
	Erratic rainfall		Low	Low	Medium	Medium	Medium	Medium	Medium		High	High
	Agricultural Runoff				Medium				Very	L		High
ım	ary Target Ratings:	Low	Medium	Low	High	Medium	Medium	Medium	Very Hi	Me	High	Overall High

Annex-3 Profile of Citizen Scientists

q	N	Di di d	A (M) 4 1 0 4 4	g :1		Sex			Cast/Ethnicity		
Sn.	Name	District	Affiliated Organization	Corridor	Male	Female	BCT	Dalit	Janajati	Madhesi	Others
1	Anchal Hamal	Parbat	Panchase Baraha CFUG	Kaligandaki		1	1				
2	Anil Thapa Magar	Tanahun	Sitlang Gadi Dharmapani CFUG	Seti River Corridor	1				1		
3	Anita Gurung	Kaski	Naulo Charchare CFUG	Seti River Corridor		1			1		
4	Balram Parajuli	Kaski	Bamdibhir CFUG	Seti River Corridor	1		1				
5	Bhagwati Dhungana	Parbat	Siddhababa CFUG	Kaligandaki		1	1				
6	Birendra Prasad Bhattarati	Gulmi	Kurauna CFUG	Kaligandaki	1		1				
7	Bishow Dal Gurung	Kaski	Raniban CFUG	Seti River Corridor	1				1		
8	Chandra Bahadur Thapa	Tanahun	Shree Siddhanath CFUG	Seti River Corridor	1				1		
9	Deepak Lamichhane	Syangja	Rapu Ban Pakha CFUG	Kaligandaki	1		1				
10	Durga Capagain	Kaski	Dhurpure CFUG	Seti River Corridor		1	1				
11	Jamuna Paudel	Syangja	Hadikhola Barsani CFUG	Kaligandaki		1	1				
12	Mani Ram Ale Magar	Gorkha	Dhumsi Bhir CFUG	Daraundi River Corridor	1				1		
13	Melina Thapa Magar	Gorkha	Dhodre CFUG	Daraundi River Corridor		1			1		
14	Milan Gurung	Parbat	Tarcbhir CFUG	Kaligandaki	1				1		
15	Nanda Gurung	Tanahun	Raniban CFUG	Seti River Corridor		1			1		
16	Pradeep Acharya	Gulmi	Behore CFUG	Kaligandaki	1		1				
17	Purna Kumari Chettri	Parbat	Panchase Baraha CFUG	Kaligandaki		1	1				
18	Ram Prasad Bhusal	Gulmi	Sorek CFUG	Kaligandaki	1		1				
19	Ramji Paudel	Kaski	Bhakarjung CFUG	Seti River Corridor	1		1				
20	Ravi Darai	Gorkha	Majuwa Deurali CFUG	Daraundi River Corridor	1				1		
21	Sabina Malla Rana	Kaski	Thotnekhola CFUG	Seti River Corridor		1			1		
22	Sakuntala Thapa	Lamjung	Marsyangdi CFUG	Marsyangdi River Corridor		1			1		

C	N	Di-4i-4	A 66'1'- 4 - 1 O'4'	G		Sex			Cast/Eth	nicity	
Sn.	Name	District	Affiliated Organization	Corridor	Male	Female	BCT	Dalit	Janajati	Madhesi	Others
23	Santosh Malla Thakuri	Gulmi	Tarakhase CFUG	Kaligandaki	1		1				
24	Sarada Gharti	Gulmi	Sota Chapre Runtas CFUG	Kaligandaki		1			1		
25	Saraswoti Paudel	Syangja	Bange Fadke CFUG	Kaligandaki		1	1				
26	Sarita Khadka	Gulmi	Ghaiya Chare CFUG	Kaligandaki		1	1				
27	Sarita Rana	Tanahun	Jumdada Jhapri CFUG	Seti River		1			1		
28	Sita Dhakal	Lamjung	Paropakar CFUG	Marsyangdi River Corridor		1	1				
29	Tulasi Prasad Gurung	Lamjung	Manaslu CFUG	Marsyangdi River Corridor	1				1		
30	Yasoda Paudel	Syangja	Panchase CFUG	Kaligandaki		1	1				
	Total				14	16	16		14		

Annex-4 List of Skill Based Training Participants

G	NT.		Address		G 11		Sex			Cast/Eth	nicity		Youth	Well	Name of
Sn.	Name	District	VDC	Ward No.	Corridor	Male	Female	ВСТ	Dailt	Janajati	Madhesi	Others	1	being status	Training Received
1	Champha Chaudhari		Doionum	1			1			1			1	Poor	
2	Sital Chaudhari		Rajapur	9	17 11		1			1			1	Poor	Sewing
3	Srishti Chaudhari	Bardia	Douletour	3	Karnali East		1			1			1	Poor	Sewing
4	Shree Kishan Tharu		Daulatpur	2	Last	1				1			1	Poor	
5	Saman Chaudhari		Bhimmapur	1		1				1			1	Poor	Carpentry
1	Uttam Bahadur Biswakarma			5		1			1					В	
2	Dammar Bdr Ghale			9		1				1				D	
3	Ghamrani Ghale			5			1			1				A	
4	Gaumati Ghale			4			1			1				D	
5	Jamuna Ghale			8			1			1				D	Shishnu
6	Gita ghale	Gorkha	Barpak	6	Daraudi		1			1				D	Powder
7	Chhalimaya BK			5		1		1					D	production	
8	Laxmi BK		-	5			1		1					D	
9	Sukumaya BK			7			1		1					D	
10	Santa Kumari BK			7			1		1					D	
11	Sano Kanchhi BK			5			1		1					D	
12	Hiral Lal Chaudhary			8		1				1			1	gha	
13	Asha Ram chaudhary			6		1				1			1	gha	Motor bike
14	Prem chaudhary			7		1				1				ga	maintenance
15	Uvaraj Chaudhary			4		1				1				kha	training
16	Niranjan Chaudhary		Gola	1		1				1			1	kha	
17	Krishnaraj Tharu	Bardia	Goia	8	Karnali River	1				1			1	gha	
18	Mahalu Tharu	Bardia		9	Corridor	1				1			1	ga	Mobile
19	Jageshwor Tharu			1	Connaon	1				1			1	ga	maintenance
20	Santosh Tharu			3		1				1		_	1	ga	training
21	mahadev tharu			8	-	1				1			1	ga	
22	Indra Chaudhary		Patabhar	8		1				1				ga	Motor bike
23	Antaram Chaudhary		rataonar	8		1				1		_	1	ga	maintenance

a	Sn. Name		Address			,	Sex			Cast/Eth	nicity		Youth	Well	Name of
Sn.	Name	District	VDC	Ward No.	Corridor	Male	Female	вст	Dailt	Janajati	Madhesi	Others	(15-24)	being status	Training Received
24	Madan Chaudhary			8		1				1			1	gha	training
25	Sukumlal Chaudhary			8		1				1				gha	
26	Vijaya Tharu			8		1				1			1	kha	-
27	Jogilal Tharu			8		1				1				ga	
28	Mahesh Kumar Tharu			8		1				1			1	gha	
29	Nagendra Tharu			8		1				1			1	gha	
30	Sukaram Tharu			8		1				1			1	ga	
31	Krishna Tharu			8		1				1			1	gha	Mobile maintenance
32	Saroj Tharu			8		1				1				ga	training
33	Deshlal Tharu			8		1				1			1	gha	uummg
34	Navin Baidh			8		1				1			1	kha	
35	Rajaram Tharu			8		1				1			1	kha	
36	Sarwan Tharu			8		1				1			1	gha	
37	Govinda Tharu			1		1				1					
38	Kiran Chaudhary			1		1				1					
39	Asha Chaudhary			1			1			1					
40	Sunit Chaudhary			3		1				1					
41	Naresh Chaudhary			3		1				1					Basic Computer
42	Amrit Baidh		а	3		1				1					Training
43	Vishal Chaudhary		tuw	4		1				1					Trummg
44	Sunita Chaudhary		Suryapatuwa	4			1			1					
45	Radha Tharu		ury	4			1			1					
46	Dhansing Yougi		N	6		1		1							
47	Tara Prasad Chaudhary			1		1				1					
48	Ramesh Chaudhary			1		1				1					Motor bike
49	Prayash Tharu			1		1				1					maintenance
50	Santosh Tharu			1		1				1					Training
51	Hariram Tharu			1		1				1					
	Total					41	15	1	6	49	0	0	24	0	

Annex-5 Details of Seedling Production

	Corridor/	Name of		Ward		Status of Seedlin	gs Production
District	Bottleneck /PA	Nursery	VDC/Municipality	No.	Duration	Name of species	# of seedlings
TAL							
N / - 1 -	Chitwan	Manakani				Bamboo	10800
Mak wanp	National	Manahari BZUC	Manahari	3	Apr-13	Bakaino	6400
ur	Park	Nursery	TVIAIIAIIAI I		71pi-13	Ipil	6400
	(CNP)					Amala	6400
						Bakaino	4000
						Tanki	1000
						Simal	4000
						Khayar	8000
Bardi	DMD	Jarahiphanta	NII	2	E.l. 12	Satishal	5000
ya	BNP	BZCF Nursery	Neulapur	2	Feb-13	Amala	3000
		Nuisery				Kalo Siris	9000
						Raj Brikshya	800
						Bel	200
						Ritha, Golmohar	100
						Bamboo	2451
						China-Berry	2200
						Soap nut	348
						Black Siris	1056
						Tanki	462
						Aonla	734
						Neem tree	154
						Teak	3178
		Betahani	Thakurdwara	5		Eucalyptus	3083
		Nursery	Inakurdwara	3	one year	Cutch tree	1078
						Chebulie	
						Myrobalan	60
						Guava	170
						Gullar	250
	Bardia					White siris	2040
Bardia	National					Cassia pods	388
Buruna	Park					Sitalachini	1020
						Serpentine	50
						Teak	489
						China-Berry	5328
						Sissoo	1039
						Cutch tree	766
						Bombax	37
			Do obour - 4'			Eucalyptus	5
		Banjariya	Pashupatingar VDC	5	one year	Emblic Myrobalan	110
			VDC			Kadam	110
						Neem tree	4
						Soap nut	27
						Banpate Soap nut	35
						White siris	703
							256
						Cassia pods	

	Corridor/	Name of		Ward		Status of Seedlin	gs Production
District	Bottleneck /PA	Nursery	VDC/Municipality	No.	Duration	Name of species	# of seedlings
						India black	
						berry	120
						Monkey Jack	50
						Ipil Ipil	1953
						Satishal	2595
						Teak	1180
						Simal	6250
						Bakaino	795
						Koiralo	2610
						Khayar	8850
						Goldmohar	750
						Harro	915
						Barro	715
						Rittha	155
Kanc		D	Bhim Datta municipality			Rajbriksha	175
hanp	SWR	Project nursery		15	1 year	Red kaner	632
ur		Hurser y	municipanty			Kapoor	107
						Saripha	518
						Bamboo Kathar	3450
							502
						Bijaya Sal Amla	388 3273
							3081
						Flower plants Eucalyptus	6768
						Amba	1166
						Dale Ghass	640
						Bet	1029
						Badahar	3500
						Amala	350
						Sisau	1485
						Khayar	305
		NTNC-			Fiscal	Kutmero	90
		Biodiversit			Year	Bakaino	4484
Chitw	Chitwan	y		_	2069/70	Golmohar	50
an	National	Conservati	Bachhauli VDC	2	(15 th July	Neem	315
	Park	on Center			2012 to July	Parijat	204
		(BCC)			2013)	Tanki	1680
					/	Shreekhanda	70
						Simal	1296
						Bas	2465
						Eucalyptus	15000
						Khayar	4800
					4/17/201	Amala	10500
	Dones	Vobobi ~ otl-			3 to	Epil Epil	8000
Bara	Parsa- Bagmati	Kabahigoth	Kabahi VDC	9	Septemb	Siris	500
	Dagman		Kabahi VDC		er 15,	Teak	3000
					2013	Kurilo	250
						Sal	3500
						Sissoo	1000

	Corridor/	Name of		Ward		Status of Seedlin	gs Production
District	Bottleneck /PA	Nursery	VDC/Municipality	No.	Duration	Name of species	# of seedlings
						Kalo Siris	8000
						Epil Epil	6500
						Eucalyptus	22000
						Bakaino	5500
						Simal	3000
						Sissoo	1950
						Satisal	7500
	Parsa-	Rangapur			April 21	Jilebi	800
Parsa	Bagmati	Rangepost	Gadi VDC	8	to June	Khayar	200
	Dugman	Nursery			30, 2013	Bel	200
						Emili	150
						Siris	3000
						Masala	5000
						Harro	100
						Barro	100
						Ritha	300
						Teak	50
						Sissoo	9000
						Simal	5000
						Satishal	2000
					Dec. '12	Amala	7000
		Banbauhari	Shantpur VDC	6	to 31st	Bijay sal	500
		Nursery	1		Jul '13	Epil Epil	6000
						Sal	4000
						Bamboo	3000
						Badhar	5000
Rauta	Parsa- Bagmati					Teak	500
hat				0	May 15, 2013 to	Eucalyptus	9000
						Jamun	4500
						Badahar	4500
		D: 11				Satisal	18000
		Brinndaban	Dishasaan VDC			Bamboo	4500
		Rangepost Nursery	Bishrampur VDC	8	Sept 15,	Amala	4500
		ruisery			2013	Siris Epil Epil	2250 6750
						Epil Epil Teak	22500
						Sissoo	10000
						Bakaino	5000
	0.1.1.1					Dukumo	3000
CUAT	Sub total						401,983.00
CHAL						Tainaat	10000
						Tejpaat	10000
						Chiuri	8000
	Seti	Mohar Jus	Dold		22 Marah ta	Bash	1000
Kaski	Riverbas	Mahendragu fa Nursery	Pokhara Municipality	16	March to	Rittha	5000
	in	ia inuisei y	iviumcipanty		31 August	Bakaino	10000
					1 Iugust	Khayer	1300
						Chaap	15000
			<u> </u>			Masala	500

Shyan gja Comparison of the content of the conte	# of seedlings 2000 5000 2000
Shyan gja Seti Riverbas in Haripala Nursery Putalibazzar Municipality Putalibazzar Municipality 6 Tanki Badahar Lapsi Bakaino Rittha Tejpaat Raikhaniyo Tanki Chaap Simal Khayer Badahar Raikhaniyo	5000
Shyan gja Seti Riverbas in Haripala Nursery Putalibazzar Municipality 6 Eapsi Bakaino Rittha Eapsi Bakaino Rittha Eapsi Bakaino Rittha Eapsi Bakaino Raikhaniyo Tanki Chaap Simal Khayer Badahar Eapsi Bakaino Raikhaniyo Eapsi Bakaino Raikhaniyo Eapsi Bakaino Raikhaniyo Eapsi Bakaino Raikhaniyo Eapsi Eapsi Bakaino Raikhaniyo Eapsi Eapsi Bakaino Raikhaniyo Eapsi	
Shyan gja Seti Riverbas in Haripala Nursery Putalibazzar Municipality 6 22 22 31 31 31 31 31 31	2000
Shyan gja Seti Riverbas in Haripala Nursery Putalibazzar Municipality Futalibazzar Municipality 6 Bakaino Rittha Tejpaat Raikhaniyo Tanki Chaap Simal Khayer Badahar Raikhaniyo	
Shyan gja Seti Riverbas in	5000
Shyan gja Seti Riverbas in Haripala Nursery Putalibazzar Municipality Putalibazzar Municipality 6 22 March to 31 August Chaap Simal Khayer Badahar Raikhaniyo	700
Shyan gja Seti Riverbas in Haripala Nursery Putalibazzar Municipality 6 March to 31 August Chaap Simal Khayer Badahar Raikhaniyo	1200
Shyan gja Riverbas in Raipala Nursery Municipality Raikhaniyo Tanki Chaap Simal Khayer Badahar Raikhaniyo	10000
Shyan gja In Nursery Municipality 31 Tanki Chaap Simal Khayer Badahar Raikhaniyo	3000
Shyan gja Simal Khayer Badahar Raikhaniyo	2500
Shyan gja Khayer Badahar Raikhaniyo	8000
gja Rnayer Badahar Raikhaniyo	3000
Badahar Raikhaniyo	2300
	5000
	10000
DSCO 22 Bas	2000
Seti Office Putalibazzar March to Chlun	2000
Riverbas compound Municipality 6 31 Bakaino	2000
in Nursery August Tanki	1000
Kalki	2000
Dhupi	1000
DFO office 28 Tejpaat	8000
Byas March to Khayer Municipality 31	2200
nursery August Simal	2350
Tejpaat Tejpaat	4200
Khayer 28	2000
Dulegauda March to Simal	4200
Rangepost Dulegauda VDC Sangepost Kapur	1000
August Amala Amala	1000
Harro	500
Barro	500
Tana lilaka 28 Tejpaat	8000
hun Rangepost Bandipur VDC March to Khotesalla	5000
Bimalnagar Bakaino	1000
August Ipilipil	1000
Abu Abukhaireni Z8 Tejpaat March to	7500
Rangepost VDC 31	
August Bakaino	5000
Tejpaat	4500
28 Khayer	2000
Rhanu March to Rarro	100
Rangepost Bhanu VDC 31 Bakaino	1200
August Ipilipil	4500
Rittha	200
Khayer	2850
Marsyan 22 Bakaino	966
Lamj gdi Bhorletar Bhorletar VDC March to	3094
ung Riverbas Rangepost in Rangepost August Rittha	1100
Gulmohar	550

	Corridor/	Name of		Ward		Status of Seedlin	gs Production
District	Bottleneck /PA	Name of Nursery	VDC/Municipality	No.	Duration	Name of species	# of seedlings
						Simal	950
						Imili	600
						Khayer	3000
					22	Bakaino	3000
		Sundarbazza	Sundarbazzar		March to	Tejpaat	500
		r Rangepost	VDC		31	Rittha	2000
					August	Lapsi	1000
						Tanki	500
						Chaap	12000
						Neem	3000
			Prithvinarayan Municipality			Simal	4000
	Daraudi Riverbas	3 kilo Nursery				Khayer	5000
					15	Babul	2000
Gork					March-	Harro	500
ha						Barro	500
	in	·			August	Tejppat	4000
						Tanki	2000
						Bas (cuttings)	500
						Bas (seeds)	3000
						Bakaino	10000
						Khotesalla	6000
	Kali				22	Tejpaat	10000
D-I	Gandaki	Rampur	D VDC		March to	Khayer	4500
Palpa	Riverbas	Rangepost	Rampur VDC		31	Lapsi	500
	in				August	Paiyou	2500
	Cub 404-1	1				Amala	2500
	Sub total						279,060
	TOTAL						681,043

Annex-6 List of Local Resource Persons (LRPs) Mobilized

						Sex		(Caste and et	hnicity		Youth
SN	Name of LRPs	Address	Landscape	District	Male	Female	ВСТ	Dalit	Janajati	Madhesi	Others	(15- 24)
1	Bhumi Prasad Kandel	Gajuri-2 Hulak tolae	CHAL	Dhading	1		1					,
2	Abinash Nepali	Deurali-8	CHAL	Gorkha	1			1				1
3	Arjun Gandharva	Gorkha M -4	CHAL	Gorkha	1			1				1
4	Chameli Shiramal	Masel-1	CHAL	Gorkha		1		1				1
5	Ek Bahadur Rana	Muchchok-1	CHAL	Gorkha	1				1			
6	Kajiram Roka	Taple-3	CHAL	Gorkha	1				1			1
7	Laxmi Sapkota	Takumajh Lakuribot-5	CHAL	Gorkha		1	1					
8	Rita Devkota	Jaubari-9	CHAL	Gorkha		1	1					
9	Rita Marhatta	Chhoprak-5	CHAL	Gorkha		1	1					1
10	Smiriti Kusunda Pokharel	Gorkha M -10	CHAL	Gorkha		1	1					1
11	Sujita Bhatta	Takumajh Lakuribot-5	CHAL	Gorkha		1	1					1
12	Sushila Rana	Mirkot-4	CHAL	Gorkha		1			1			1
13	Til Kumari Ghale	Barpak-4	CHAL	Gorkha		1			1			1
14	Anjana Subedi	Dikurpokhari 2	CHAL	Kaski		1	1					
15	Bimala Adhikari	Dhital 1	CHAL	Kaski		1	1					
16	Dilmaya BK	Bhadaure Tamagi 4	CHAL	Kaski		1		1				
17	Janaki KC	Kaskikot 1	CHAL	Kaski		1	1					
18	Kirshna Kumari Paudel	Phumdi bhumdi 3	CHAL	Kaski		1	1					
19	Kopila KC	Lamachaur 4	CHAL	Kaski		1	1					
20	Laxmi Adhikari	Dikurpokhari 1	CHAL	Kaski		1	1					
21	Laxmi Paudel	Salyan 2	CHAL	Kaski		1	1					
22	Narayani Adhikari	Puranchaur 6	CHAL	Kaski		1	1					
23	Narayani Adhikari	Sardikhola 1	CHAL	Kaski		1	1					
24	Pabrita Ojha Subedi	Kristnatnechaur 3	CHAL	Kaski		1	1					
25	Rama Tripathi	Hemja 6	CHAL	Kaski		1	1					
26	Rashmi Nepali	Lamachaur 4	CHAL	Kaski		1		1				
27	Sanju BK	Chapakot 9	CHAL	Kaski		1		1				
28	Shanta Tamang Chettri	Sarang kot 9	CHAL	Kaski		1			1			

						Sex		(Caste and et	hnicity		Youth
SN	Name of LRPs	Address	Landscape	District	Male	Female	ВСТ	Dalit	Janajati	Madhesi	Others	(15- 24)
29	Susmita Thapa	Sarang kot 8	CHAL	Kaski		1	1					1
30	Bikas Gurung	Bhulbhule-2	CHAL	Lamjung	1				1			
31	Budha Bdr Gurung	Ghermu-4	CHAL	Lamjung	1				1			1
32	Manju Sunar	Udipur-5	CHAL	Lamjung		1		1				1
33	Pratigya KC	Sundarbazar-2	CHAL	Lamjung		1						1
34	Rita Dhungana	Bharte-5	CHAL	Lamjung	1							1
35	Sabina Parajuli	Ghausahar-8	CHAL	Lamjung		1	1					
36	Sangita Gurung	Tarkughat-2	CHAL	Lamjung		1	1					
37	Ser Bdr Thapa	Bhulbhule 5	CHAL	Lamjung	1		1					
38	Shrijana Rimal	Bajakhet-8	CHAL	Lamjung		1	1					1
39	Som Kumari Gurung	Bajakhet	CHAL	Lamjung		1			1			
40	Surya Kumari BK	Tarkughat-1	CHAL	Lamjung		1		1				
41	Yona Gurung	Bhulbhule-1	CHAL	Lamjung		1			1			1
42	Bishnu Karki	Phedikhola	CHAL	Syangja		1	1					1
43	Mina Dhakal	Bangsing Deurali	CHAL	Syangja		1	1					1
44	Srijana Paudel	Bhatkhola	CHAL	Syangja		1	1					
45	Sumitra baral Paudel	Arukharka 6	CHAL	Syangja		1	1					
46	Bina Gurung	Dharampani-4	CHAL	Tanahu		1			1			1
47	Diksya Ghimera	Bandipur-6	CHAL	Tanahu		1	1					
48	Kopila Pariyar	Jamune-1	CHAL	Tanahu		1		1				1
49	Raju Gharti	Keshavtar-5	CHAL	Tanahu	1				1			1
50	Ram Maya Rana	Bandipur-6	CHAL	Tanahu		1			1			
51	Rita Gurung	Devghat-8	CHAL	Tanahu		1			1			1
52	Yosada Sunar	Chhang-1	CHAL	Tanahu		1		1				1
53	Bikash Bista	Kamdi	TAL	Banke	1		1					
54	Dilli Raut	Puraini	TAL	Banke	1		1					
55	Jamuna Chaudhary	Fattepur	TAL	Banke		1			1			1
56	Karna Bahadur BK	Manikapur	TAL	Banke		1		1				
57	Krishna Tharu	Fattepur	TAL	Banke	1				1			

						Sex		(Caste and et	hnicity		Youth
SN	Name of LRPs	Address	Landscape	District	Male	Female	вст	Dalit	Janajati	Madhesi	Others	(15- 24)
58	Om Kumari Khadka	Basudevpur	TAL	Banke	1		1					
59	Rama Raut	Kamdi	TAL	Banke	1		1					1
60	Rita Thapa	Kamdi	TAL	Banke	1				1			
61	Shree Ram Chaudhary	Binauna	TAL	Banke	1				1			1
62	Sunita Sunar	Manikapur	TAL	Banke		1		1				1
63	Sushil Sharma	Manikapur	TAL	Banke	1		1					1
64	Basanti Chaudhari	Bhimmapur-1	TAL	Bardia		1			1			1
65	Bishnu Ram Chaudhari	Daulatpur- 5	TAL	Bardia	1				1			
66	Bishnu Thapa	Rajapur-1	TAL	Bardia		1			1			
67	Dulari Chaudhari	Rajapur- 6	TAL	Bardia		1			1			1
68	Lautan Tharu	Rajapur-8	TAL	Bardia	1				1			
69	Sanjita Rijal	Badalpur- 9	TAL	Bardia		1	1					1
70	Sukra Raj Tharu	Patabhar-4	TAL	Bardia	1				1			
71	Tularam Tharu	Daulatpur- 2	TAL	Bardia	1				1			
72	Ajay Kumar Tamang	Bha.Na.Pa	TAL	Chitwan					1			
73	Ambika Gurung	Piple	TAL	Chitwan		1			1			
74	Asha Lopchan	Jutpani	TAL	Chitwan		1			1			
75	Ashok Rana Magar	Dahakhani-8, Simaldhap	TAL	Chitwan	1				1			
76	Jamuna Poudel	Jutpani	TAL	Chitwan		1	1					
77	Mandira Magar	Dahakhani-9,Bhalumara	TAL	Chitwan		1			1			1
78	Manisha Thapa Magar	Dahakhani-9, Gardash	TAL	Chitwan		1			1			1
79	Rajendra Dhungana	Shaktikhor	TAL	Chitwan	1		1					
80	Rita Nepali	Gardi-8, Madi	TAL	Chitwan		1		1				
81	Sabina BK	Gitanagar	TAL	Chitwan		1		1				
82	Sabitri Sunar	Ayodhyapuri-9, Madi	TAL	Chitwan		1		1				1
83	Sarita Gurung	Dahakhani	TAL	Chitwan		1			1			
84	Sumina Kunwar	Bha.Na.Pa	TAL	Chitwan		1	1					
85	Usha Mahato	Padampur	TAL	Chitwan		1			1			
86	Bharat Giri	Urahari-2	TAL	Dang	1						1	

						Sex		(Caste and et	thnicity		Youth
SN	Name of LRPs	Address	Landscape	District	Male	Female	ВСТ	Dalit	Janajati	Madhesi	Others	(15- 24)
87	Bhupbahadur KC	Tulsipur NP- 8	TAL	Dang	1		1					
88	Dilli DC	Manpur-9	TAL	Dang	1		1					
89	Janaka KC	Narayanpur-2	TAL	Dang		1	1					
90	Kamal Sharma	Pawananagr-8	TAL	Dang	1		1					
91	Khemlal Mahatara	Tulsipur NP- 2	TAL	Dang	1		1					
92	Khima Adhikari	Laximipur-2	TAL	Dang		1	1					
93	Lebendra KC	Duruwa-2	TAL	Dang	1		1					
94	RobarBahadur KC	Saudiyar-5	TAL	Dang	1		1					
95	Anju Chaudhary	Dhansinghpur-2	TAL	Kailali		1			1			1
96	Baliram Chaudhary	Narayanpur-7	TAL	Kailali	1				1			
97	Bhagawati Dhungana	Durgauli -2	TAL	Kailali		1	1					
98	Bhoj Bahadur B K	Malakheti 3	TAL	Kailali	1			1				
99	Dan Bahadur Sodari	Tikapur 9	TAL	Kailali	1		1					
100	DandiRaj Subedi	Dhangadhi 6	TAL	Kailali	1		1					
101	Eakendra Sunar	Sugarkhal	TAL	Kailali	1			1				1
102	Ganesh Bahadur Shahi	Durgauli -2	TAL	Kailali	1		1					
103	Gobinda Singh Rawat	Baliya-8	TAL	Kailali	1		1					
104	Gyanu Budthapa	Baliya-8	TAL	Kailali		1	1					
105	Janak Kuwar	Baliya 8	TAL	Kailali	1		1					
106	Kausilya B K	Dhangadhi 6	TAL	Kailali		1			1			
107	Prakash BK	Udasipur 3	TAL	Kailali	1			1				
108	Premlal Chaudhary	Durgauli-6	TAL	Kailali	1				1			
109	Rampati Chaudhary	Hasuliya 6	TAL	Kailali		1			1			
110	Ramuram chaudhary	Pawera 3	TAL	Kailali	1				1			
111	Ranga Bhattarai	Baliya-5	TAL	Kailali		1	1					
112	Ratna Saud	Dhansingpur 2	TAL	Kailali		1	1					1
113	Sampat Chaudhary	Gadaraiya 1	TAL	Kailali	1				1			
114	Saraswati Rawal	Patharaiya-	TAL	Kailali		1	1					
115	Sarita Sodari	Tikapur	TAL	Kailali		1	1					1

				District	9	Sex		C	Caste and et	hnicity		Youth
SN	Name of LRPs	Address	Landscape	District	Male	Female	BCT	Dalit	Janajati	Madhesi	Others	(15- 24)
116	Tek Bahadur thapa	baliya 6	TAL	Kailali	1		1					
117	Tulasi Devkota	Geta 3	TAL	Kailali		1	1					
118	Yadav Prasad Bhandari	Phulbari 7	TAL	Kailali	1		1					
119	Bina Joshi	Krishnapur-2, Bani	TAL	Kanchanpur		1	1					1
120	Birendra Bahadur Singh	Daiji-5, Bhamka	TAL	Kanchanpur	1		1					
121	Deepak Bista	Bhimdatt-10, Tilkeni	TAL	Kanchanpur	1		1					
122	Laxmi Karki	Bhimdatt-9, Matena	TAL	Kanchanpur		1	1					1
123	Laxmi Kunwar	Bhimdatt-9, Bramhadev	TAL	Kanchanpur		1	1					
124	Manju Joshi	Bhimdatt-10, Tilkeni	TAL	Kanchanpur		1	1					1
125	Pushpa Kunwar	Bhimdatt-1, Barakunda	TAL	Kanchanpur		1	1					
126	Rajendra Bhandari	Daiji-4, Bagun	TAL	Kanchanpur	1		1					
127	Raju Ram Sarki	Daiji-4, Sarki tole Baitada	TAL	Kanchanpur	1			1				
128	Shiva Datt Panta	Krishnapur-4, Gulariya	TAL	Kanchanpur	1		1					
129	Guransh Rai	Manahari	TAL	Makawanpur		1			1			1
130	Indar Laxmi Waiba	Handikhola	TAL	Makawanpur		1			1			1
131	Kalpana Pudasaini	Chhatiwan	TAL	Makawanpur		1	1					1
132	Satyawarti Dhakal	Handikhola	TAL	Makawanpur		1	1					1
133	Sunkeshari Rumba	Churiyamai	TAL	Makawanpur		1			1			1
134	Anjela Saru	Dhaubadi-3	TAL	Nawalparasi		1			1			1
135	Binu Mahato	Argauli-4	TAL	Nawalparasi		1			1			
136	Dropadi Gurau	Pithauli	TAL	Nawalparasi		1			1			
137	Krishna Prasad Soti	Devchuli -3	TAL	Nawalparasi	1				1	_		1
138	Shreejana Gurung	Shivamandir-8	TAL	Nawalparasi		1			1			
139	Susmita Gurung	Mukundapur-7	TAL	Nawalparasi		1			1			1
	Total		_		51	87	69	19	48	0	1	49

HARIYO BAN PROGRAM

Framework Environmental Mitigation and Monitoring Plan

(Year 2011/012 - 2015/016)

Submitted to:

Hariyo Ban Program

WWF Nepal











Disclaimer: This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents of this Report are the responsibility of WWF Nepal and do not necessarily reflect the views of USAID or the United States Government.

Sagendra Tiwari

Consultant

May, 2013

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Sagendra Tiwari

Consultant

List of Abbreviations and Acronyms

AEPC: Alternative Energy Promotion Center

BSP: Biogas Support Program

BZ: Buffer Zone

BZC: Buffer Zone Committee

BZCFUGs: Buffer Zone Community Forest Users Groups

CAPA: Community Adaptation Plan of Action

CBD: Convention on Biodiversity

CC: Climate Change

CE: Categorical Exclusion

CEQ: Council of Environmental Quality
CF: Community Forest/Community Forestry

CFCC: Community Forestry Coordination Committee

CFOP: Community Forest Operational Plan CFUGs: Community Forest User Groups

CoP: Chief of Party

CHAL: Chitwan-Annapurna Landscape

CITES: Convention on International Trade on Endangered Species

CNP: Chitwan National Park DCoP: Deputy Chief of Party

DFO: District Forest Office/Officer

DoF: Department of Forest

EA: Environmental Assessment

EAC: Environment Assessment Checklist EIA: Environmental Impact Assessment EIS: Environmental Impact Statement

EMMP: Environmental Mitigation and Monitoring Plan

EPA: Environmental Protection Act, 1997

EPR: Environmental Protection Regulation, 1997

FECOFUN: Federation of Community Forest User Groups Nepal

FEMMP: Framework Environmental Mitigation and Monitoring Plan

GHG: Greenhouse Gas
GoN: Government of Nepal
HBP: Hariyo Ban Program
HWC: Human Wildlife Conflict
IAPS: Invasive Alien Plant Species
ICS: Improved Cooking Stove
IGA: Income Generating Activities

IEE: Initial Environmental ExaminationILO: International Labor OrganizationLAPA: Local Adaptation Program of Action

M&E: Monitoring and Evaluation

MEAs: Multilateral Environmental Agreements

MoEST: Ministry of Environment, Science and Technology

MoFSC: Ministry of Forest and Soil Conservation

MoV: Means of Verification

NAPA: National Adaptation Program of Action

NRM: Natural Resource Management

NDC: Negative Determination with Condition NGOs: Non-Governmental Organizations

NPWC: National Parks and Wildlife Conservation NTNC: National Trust for Nature Conservation

REDD+: Reduction of Emissions due to Deforestation and Forest Degradation

SFM: Sustainable Forest Management

TA: Technical Assistance TAL: Terai-Arc Landscape

UNCCD: United Nations Convention to Combat Desertification
UNFCCC: United Nations Framework Convention on Climate Change

USAID: United States Agency for International Development

Executive Summary

The USAID funded Hariyo Ban Program (HBP) implemented by a consortium of four partners in two very important landscapes of Nepal aims at reducing adverse impacts of climate change and threats to biodiversity in Nepal. The purpose of this study is to assess the potential environmental and social impact of the program activities despite the program's orientation to creating strongly positive impact on the environment and on the livelihoods and wellbeing of the people. As per the given terms of reference, this report provides i) an assessment of the potential environmental and social impacts of HBP activities, ii) a framework environmental mitigation plan (FEMMP), iii) recommends mechanism for planning and implementing the EMMP, monitoring, reporting and backstopping on the effectiveness of mitigation actions, iv) recommends required coordination and communication mechanism, v) recommends mechanism for ensuring environmental compliance, vi) assesses training needs of the core team and consortium partner staff and proposes a training package to enable them plan and implement EMMPs, vii) provides an indication of funds requirement for the FEMMP implementation and viii) suggests approach for the environmental compliance reporting.

Chapter 2 reviews the compliance requirements for all NDC-marked HBP activities and provides an assessment of the program and program activities. The assessment has revealed that the program overall is in compliance with the specific congressional earmarks of funding. An assessment of the international environmental conventions/agreements/accords of which Nepal is a party and/or signatory to reveals that HBP is not only in compliance with relevant international agreements but also contributes significantly to Nepal's efforts to meeting the provisions of these agreements. An assessment of Nepal's relevant environmental policies, acts, rules and guidelines shows that the HBP in general is in compliance with Nepal's environmental policies, acts, rules and guidelines. However, 29 out of 41 specific activities needed to meet one or the other IEE conditions, and 10^{1} out of those 29 activities could potentially have significant adverse impact on environment and/or society in case mitigation measures are not devised. A participatory assessment of these 10 specific activities was undertaken using a purposefully designed impact scoring checklist, field observation and interaction with relevant beneficiary group members. It revealed that the potential adverse impacts in case of these 10 specific activities are localized, of short term nature and low magnitude. They could be mitigated with minimum efforts in course of implementation and therefore could not be rated significant.

An FEMMP is developed in matrix form (<u>Annex 4</u>) that builds on its desired specific features and comprises, potential environmental impacts, required IEE conditions, specific mitigation

¹ biogas, ICS, fire line maintenance, nursery construction, leasehold forestry and piloting of cardamom, ginger, turmeric etc. in CF under sustainable landscape component and species translocation and re-introduction, HWC mitigation, mechanism for biological control and cultivation of cardamom, ginger, turmeric, broom grass under biodiversity conservation component

action, indicators of implementation, responsibility and schedule for i) implementation, ii) monitoring of implementation and iii) monitoring of the effectiveness of mitigation actions. An elaboration on mitigation actions implementation and reporting responsibilities, monitoring measures, monitoring implementation and effectiveness of mitigation actions is provided. An analysis of existing coordination and communication mechanism and justification for improvement in identified aspects has been presented. Justification for the budget requirement in specific areas of EMMP planning, implementation and monitoring is provided and a training package for consortium partners' staff for EMMP preparation and implementation is proposed based on a rapid training needs assessment.

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1. Introduction

1.1 Hariyo Ban Program Overview

The "Hariyo Ban" Program is a five-year program funded by USAID and being implemented by a consortium of four partner organizations - WWF Nepal, CARE Nepal, National Trust for Nation Conservation (NTNC) and Federation of Community Forest User Groups, Nepal². The vision for the program is "restored forest corridors that sequester carbon with enhanced wildlife populations where local communities" wellbeing is improved and their resilience to climate change enhanced through benefits from natural resources and payments for ecosystem services. Women and vulnerable poor, and socially excluded people have improved livelihoods and play active roles in environmental stewardship".

The overall goal of Hariyo Ban program is to reduce adverse impacts of climate change and threats to biodiversity in Nepal. Program has three integrated objectives: 1) to reduce threats to biodiversity in target landscapes; 2) to build the structures, capacity and operations necessary for an effective sustainable landscape management, especially reducing emissions from deforestation and forest degradation (REDD+) readiness; and 3) to increase the ability of target human and ecological communities to adapt to the adverse impacts of climate change.

Hariyo Ban is being implemented in i) Terai Arc Landscape (TAL) and Chitwan Annapurna Landscape (CHAL). In its 1st and 2nd year of implementation, it is working in 11 districts from central to far-west terai and 12 districts north-south in central and western regions. Chitwan and Nawalparasi districts overlap in both landscapes. At the landscape level, the program works with natural resource management (NRM) groups and climate vulnerable communities. At the national level, it supports for the development of policy and other enabling frameworks and mechanisms by working in partnerships with relevant ministries, departments, civil society organizations, academic institutions and private sector organizations as they contribute in and benefit from the program.

1.2 The Assignment and deliverables

As is evident from its objectives, the Hariyo Ban program is intended to create strongly positive impact on the environment and on the livelihoods and wellbeing of the people in target landscapes. Yet it strives to ensure none of its program activities cause any significant direct, indirect or cumulative adverse environmental impact in short or long term. Accordingly, the program aims to undertake an environmental assessment of program activities, plan and implement mitigation measures for potential adverse impacts, if any, and monitor the effectiveness of the mitigation measures to be implemented in parallel with the program activities.

The purpose of this assignment is to prepare a framework environmental mitigation and monitoring plan and recommend overall mechanism in Hariyo Ban program (between center and

² Refer to Hariyo Ban Program Technical Application document

field and among the consortium partners) for sufficient and effective environmental compliance (ToR in ANNEX 3). The specific objectives transformed in to the key deliverables are:

- 1) Prepare a framework environmental mitigation and monitoring plan (FEMMP) through review and identification of potential negative impacts (both environmental and social) likely in each category of activities, in consultation with Hariyo Ban Program core team and consortium partners in Kathmandu and the field
- 2) Recommend an overall practical mechanism between the center and fields in all consortium partner organizations for preparation of site specific mitigation plans, its implementation, monitoring, reporting, and feedback
- 3) Recommend an effective communication and coordination mechanism among consortium partners for sharing their concerns, best practices, and lessons learnt in the context of environmental compliance
- 4) Recommend a mechanism to be established for ensuring environmental compliance of the activities under window of opportunity
- 5) Recommend any training that may be required to build capacity of the staff of the core team or consortium partners at different levels, for assessing impacts, mitigating them and reporting in accordance with both national and international environmental obligations
- 6) Estimate budget required for implementing mitigation and monitoring plan of each category of activity. Also indicate and estimate where addition of funds is needed for environmental compliance as prescribed by the United States Agency for International Development (USAID).
- 7) Prepare environmental compliance report for submission to USAID and for use by Hariyo Ban Program and its consortium partners

1.3 Methodology

- 1) **Review:** Following categories of documents (listed in reference) were reviewed:
- Relevant documents of Hariyo Ban Program RFA, program document, annual work plans of year 1 and 2, monitoring and evaluation (M & E) Plan, Environmental Mitigation and Monitoring Plan (EMMP) factsheet and IEE factsheet from USAID;
- Relevant international (multi-lateral) environmental conventions/accords/agreements which Nepal needs to comply with including 22 CFR 216 of the funding government – the USA.

- Relevant environment, climate change, forest and biodiversity related national policies, acts and regulations of Nepal.
- Web-based literature on environmental and social impacts of specific activities

2) Identification and assessment of potential adverse environmental and/or social impacts of program activities:

- Potential adverse environmental and social impacts of (negative ditermination with conditions) NDC-marked program activities was identified and assessed on the basis of review work and consultation with core team. An FEMMP matrix (draft) was prepared. It contained potential adverse impacts of NDC marked activities, their likely significance, required initial environmental examination (IEE) condition and specific mitigation actions. Draft FEMMP matrix was shared with all coordinators and further refined incorporating their comments.
- In the draft FEMMP, activities e.g., support for biogas and improved cooking stove (ICS) installation, fire line maintenance, species translocation and re-introduction, power fencing, leasehold forestry promotion in community forests (CFs) etc. were suspected likely to have significant adverse impacts. In order to further probe into these activities for significance of likely impacts, an **impact scoring checklist** (Annex 2) was developed for the participatory assessment of significance of impacts. The purpose was to further assess the likely impacts based on field observation of the modality of implementation and a participatory assessment of impact by the field staff responsible for activities implementation.

3) Consultation meetings with Hariyo Ban core team and field staff in two landscapes:

- Two meetings were held with core team and telephonic consultation was held with Hariyo Ban focal persons in CARE Nepal and FECOFUN in course of review and identification of potential adverse impacts of program activities.
- Consultations were held with consortium partner's staff at landscape levels. An interaction with field staff and NGO personnel working in Gorkha and Lamjung Districts could also be organized in Gorkha. In landscape level consultations, an overview of the FEMMP and the draft matrix was presented, the need to deeply probe into the significance of impacts of selected activities and how to do that in the impact scoring checklist was also explained. The landscape level team agreed to undertake a participatory assessment of significance of impact and include into the impact scoring checklist and return to the consultant. Accordingly, **filled in impact scoring checklists** were received (**Annex 2**) which formed the basis for further refinement of the FEMMP.

- A second objective of landscape level consultation was to probe into the already existing knowledge, skills and experience of the consortium partner field staff with respect to identification of likely adverse impacts of activities and planning and implementing mitigation actions side by side the activities implementation.
- A third purpose of the landscape level consultation was to understand the existing coordination and communication mechanism including their effectiveness in order to recommend for further refinement in existing mechanism to facilitate sharing and lesson learning in course of the implementation of FEMMP. A set of questions (Annex 3: checklist for information generation at landscape level) were framed for the 2nd and 3rd purposes and used during consultation. The outcome of consultation formed the basis for recommendation accordingly.

4) Field observation of selected on-going activities, informal interaction with community members and further validation of likely impacts and their significance:

- Activities being implemented in the field e.g., biogas and toilets, fire line maintenance, livelihoods enhancement activities, power fencing etc. were observed during the field visits in Kaski, Gorkha, Tanahu, Chitwan National Park area and Banke Districts. The purpose was to understand the approaches and modalities involved in the implementation of specific activities and further assess the likeliness of adverse impacts including their significance.
- Target community members available during the field visits were also informally consulted. The focus of consultation revolved around their knowledge, awareness and perceptions about the likely benefits and negative effects of the activities they were involved in with support from Hairiyo Ban. A report on the findings from the field visit is also prepared and submitted.

5) Finalization of FEMMP matrix and preparation of draft FEMMP report

FEMMP matrix was completed and a draft FEMMP (ANNEX 4) was prepared based on the analysis of the findings from the field visits. The FEMMP report and the matrix have been finalized and submitted based on the comments from the core team and consortium partner focal persons.

2. Compliance Assessment of Hariyo Ban Program

2.1 Provisions for Compliance as per 22 CFR 216

22 CFR 216³ of the funding agency - the United States Government provides a general procedure as per the A.I.D policy meant for the USAID country offices to ensure environmental factors and values are incorporated in the development projects planned and implemented in developing countries abroad through USAID assistance. It has 10 chapters starting from introduction to reports and records.

"Environment" as defined in 22 CFR 216 means *natural and physical environment*, and the "significant effect" with respect to the effects on environment is defined as the *significant harm likely to cause to the environment due to a proposed action*.

The procedure defines an initial environment examination (IEE) as the first review of the reasonably foreseeable effects of a proposed action on the environment. IEE provides a brief statement of the factual basis for a *threshold decision* as to whether an environmental assessment (EA) or an environmental impact statement (EIS) will be required.

Council of Environmental Quality (CEQ) Regulations forms the basis for determining the potential environmental consequences of a program, project or activity. The procedure provides a set of criteria based on which a program/project or its specific activity could be classified into i) Categorical Exclusion (CE) or ii) Negative Determination with Condition (NDC), or iii) Positive Determination (PD).

CE: As indicated in the IEE fact sheet of Hariyo Ban Program " activities identified under all objectives that are related to technical assistance, research, assessments, workshops, meetings, training, issue-based discussions, policy formulation, and associated analysis, dialogue, and partnerships at national, landscape and community levels including documentation and information dissemination" are recommended as **CE** as they do not have an effect on the natural or physical environment as per the provisions of 22 CFR 216.2c (2) (i), (iii), and (v).

22 CFR 216.3 section (a) provides general procedures under which sub-section (1) deals with preparation of IEE, (2) with threshold decision, (3) with negative declaration, (4) with scope of EA or EIS, (5) with preparation of EA and EIS, and it goes on up to (8) monitoring, (9) revision and (10) other approval documents.

³ Refer to www.law.cornell.edu/cfr/text

NDC: For Hariyo Ban Program activities, threshold decision has been taken as per 216.3(a) 2(iii)⁴, and <u>all activities not categorized as CE</u> under all objectives have been <u>recommended as NDC</u> considering that these might have environmental impacts in case they are not in compliance with the Government of Nepal's environmental protection acts, rules and regulations and also with the relevant international environmental conventions/accords/agreements, of which Nepal is party to. Program must also comply with the conditions of the USG Congressional Earmarks for a) biodiversity, b) GCC sustainable landscapes and c) GCC adaptation. Hariyo Ban program will need to plan and implement mitigation measures for the activities likely to make potential adverse impact on environment (and/or society), and prepare an environment assessment checklist (EAC) provided in the IEE fact sheet.

The subsequent sub-sections 2.2 and 2.3 below provide a brief analytical account of the Hariyo Ban Program's compliance as per the 22 CFR 216.

2.2 Compliance as per U.S.G. Congressional Earmarks

This section is intended to assess whether the Hario Ban Program design meets the conditions set in the USG Congressional Earmark.

Biodiversity Earmark: Hariyo Ban program has explicit biodiversity objective, its activities are defined based biodiversity threat assessment/analysis in target landscapes, indicators to be monitored are explicit to biodiversity conservation, and site-based program activities are specifically undertaken in biologically significant areas to positively impact on biodiversity. The biodiversity component fully complies with the earmark by meeting all the four criteria of compliance (*refer to Monitoring and Evaluation plan of the program*)

Sustainable Landscapes Earmark: The sustainable landscape component is fully in compliance with the earmark. It has explicit GCC objective, and it meets all criteria under policy priorities e.g., contributing in creation of national and sub-national level REDD+ strategies, greenhouse gas (GHG) accounting, forest carbon market readiness and field demonstration of REDD+. As per the M&E plan, the program has standard GCC indicator for policy, capacity and CO2, and annual reporting can be done on all four specified points including how the activity supports USG commitments under the United Nations Convention on climate change (UNFCCC).

⁴ 216.3(a) 2(iii) states "A Positive Threshold Decision shall result from a finding that the proposed action will have a significant effect on the environment. An Environmental Impact Statement shall be prepared if required pursuant to 216.7 If an impact statement is not required, an Environmental Assessment will be prepared in accordance with 216.6. The cognizant Bureau or Office will record a Negative Determination if the proposed action will not have a significant effect on the environment."

Adaptation Earmark: This component of Hariyo Ban program also meets the funding, objective, indicators and outcome criteria to a larger extent. Program's M&E plan provides standard GCC indicator and is able to measure the impact of activities. The focus of the component is on reducing the climate change (CC) induced vulnerabilities on human and natural systems. It reveals the full compliance of the component with the Adaptation Earmark.

2.3 Compliance as per National Environmental Acts and Rules

Hariyo Ban program has categorically been designed to respond to the conservation and management needs of Nepal's forests including diverse and unique biological resources. Technically sound forest and biodiversity management in Nepal is critically vital to maintain ecological processes and species, including environmental goods and services on which millions of rural people of Nepal depend. In addition, the unpredictable climate change impacts impose added threats and vulnerabilities on ecosystems, communities of plants and wildlife and forestdependent communities at large. The program objectives and outcomes have broadly been formulated in line with Nepal's environmental policies, legal/institutional frameworks and international environmental obligations. Hence, a desired level of environmental compliance has been factored into the Hariyo Ban Program design. Nevertheless, the likeliness of adverse environmental effects of specific program activities cannot fully be ruled out unless the local environmental context in which the activities are implemented, and its likely consequences is carefully assessed. In this backdrop, a critical review of Nepal's key environmental policies, acts rules and guidelines given below reveals that the Hariyo Ban program activities are in compliance with them in general although mitigation measures will need to be taken while implementing many identified program activities.

Environment Protection Act (EPA), 1997 promulgated on January, 1997 aims at maintaining healthy environment and protecting human beings, wildlife, plants, nature and physical infrastructure through sustainable management and wise use of natural resources in line with the principles of sustainable development. With inaction of this act:

- IEE of development project proposals is mandatory as per article 3.
- Prior approval for implementation of development projects from the government of Nepal (GoN)/Ministry of Environment is mandatory as per article 4.
- Project proponents must submit their proposal including the IEE report to the GoN and get approval prior to project implementation as per article 5.
- In case a full environmental impact assessment (EIA) is deemed necessary by relevant GoN ministry and/or expert committee appointed by the GoN, the project proponent shall be notified accordingly as per article 6.
- Article 7 articulates the prevention and control of pollution and adverse environmental impact from all sorts of development projects. Environmental inspection of prescribed mitigation measures in IEE and EIA reported is detailed out in article 8.

- Article 9 has obligatory provision on the project executing agency(s) to ensure cultural and natural heritage sites within the project area are protected including the outstanding objects within them e.g., places, plants and animals.
- Remaining 15 articles of this act provide detailed provision for legal, institutional and procedural matters for effective implementation of this act.

Environment Protection Rules (EPR), 1997 is the legal instrument to implement the EPA, 1997. Under its schedule 1 and 2, the EPR provides the size and nature of the projects for which IEE and/or EIA shall be mandatory. Activities e.g., plantation of indigenous species, imported species and handing over of forests for leasehold forestry, forest roads and fire line construction with specified limits are subject to IEE and/or EIA. Plans for watersheds, forests and protected area management are also subject to IEE. A review of the forestry sector activities listed for IEE (schedule 1) and for EIA (schedule 2) (ANNEX 1) reveals that a set of activities planned under three components of Hariyo Ban program (Table 1 below) will need to meet certain IEE conditions to comply with EPR 1997. Accordingly, specific mitigation actions will have to be planed and implemented for many of those activities as proposed in the FEMMP.

Table 1: Hariyo Ban Program Activities that require meet defined IEE Conditions as per Nepal's EPA and EPR. 1997

Activities Program Components									
Sustainable Landscape	Biodiversity Conservation								
1. Forest Carbon Inventory Training 2. Support to AEPC and BSP 3. Fire line maintenance in CFs 4. Nursery Establishment 5. Support for plantation 6. Support to reduce D and FD 7. Leasehold forestry in CFs 8. Revision/amendment of CFOP 9. Piloting of cardamom, ginger, turmeric and broom grass cultivation 10. Support for green enterprises development 11. Development of 2nd gold standard for biogas TAL	 Species re-introduction HWC mitigation Mechanism for biological control of invasive alien species Wetland restoration and management Support to implement subwatershed management plan Cardamom, ginger, turmeric and broom grass cultivation – support Promotion of community managed tourism Micro-credit and IGA Swertia cultivation Bamboo plantation and handicraft Conservation plantation and 								
	Sustainable Landscape 1. Forest Carbon Inventory Training 2. Support to AEPC and BSP 3. Fire line maintenance in CFs 4. Nursery Establishment 5. Support for plantation 6. Support to reduce D and FD 7. Leasehold forestry in CFs 8. Revision/amendment of CFOP 9. Piloting of cardamom, ginger, turmeric and broom grass cultivation 10. Support for green enterprises development 11. Development of 2nd gold standard								

Regulations relevant to Forest and Wildlife Protection: As per section (68) of the **Forest Act 1993**, any part of a forest in any category could be released for any program of national priority provided it assures no significant adverse environmental impact on forests. So the development projects related to forest and forestry and not likely to create any adverse environmental impact indicated by an IEE could be implemented provided any mitigation actions deemed necessary are

also planned and implemented side by side. The *National Park and Wildlife Conservation* (*NPWC*) *Act*, *1973*, a key regulatory framework intended at the protection of faunal diversity of Nepal has a range of provisions that prohibit activities likely to cause adverse environmental impact. The rules and regulations framed under Forest Act and NPWC Act provide the detailed procedure for the implementation of these acts to protect wildlife and the natural environment where they exist. Section 4 and 5 of the *Aquatic Animals Protection Act*, *1961* including its *First Amendment*, *1998* impose prohibition on catching, killing and/or harming protected aquatic life by poisoning and/or using pesticides in their natural environment. The Water Resources Act, 1993 provides for i) environmental standard for utilization of water resources (section 18), ii) mandatory EIA for projects utilizing water resources (section 20) and iii) prohibits all kinds water pollution beyond the approved environmental standard (section 24).

Nepal Biodiversity Strategy, 2002 is the blue print of protection and wise use of Nepal's rich and diverse biological resources. The strategy is built around the fact that Nepal's biological resources remains at the center stage of Nepalese people's livelihood security and national economy, Nepal's unique and significant biological diversity is showcased in agriculture, wetlands, rangelands, and forest ecosystems across its physiographic regions and along the species, genetic, habitat and ecosystem levels in landscapes. Accordingly, this strategy emphasizes a threat based approach to biodiversity conservation from species to landscape level through people's wider participation, cross-sectoral integration and legal/institutional refinements – all of which are adequately captured in Hariyo Ban program design.

National Wetlands Policy, 2012 replaces Nepal's Wetland Policy, 2002 and emphasizes on cross-sectoral approach to wetlands conservation. Development interventions in and around a wetland needs to use environmentally friendly technology and ensure wetlands functions and services remain intact as per article 5.1.14. Article 5.1.15 requires the projects to identify issues facing wetlands due to climate change impacts and undertake effective mitigation measures. Conservation and sustainable use of wetland resources shall be subject to maintenance of its floral and faunal diversity and richness (article 5.2.2). Polluting wetlands in any ways or heavy exploitation of ground water surrounding wetlands has to be discouraged and controlled (article 5.2.3). As per article 5.1.8, development interventions likely to make significant environmental impact on wetland structures, diversity and functions must undergo an IEE, and as required, a full EIA as appropriate and implement mitigation measures. In case of Hariyo Ban activities, withdrawal of water from natural water sources, retention of water in man-mad ponds, check dams construction and many wetlands restoration related activities e.g., cleaning of biomass from the water bodies including some construction related activities as might be necessary for CAPA implementation will need to take specific mitigation measures even when they remain within the legal compliance level.

Climate Change Policy, 2011 of Nepal is promulgated with a mission to address the adverse impacts of climate change and utilize the opportunities created from it to improve livelihoods

and achieve climate-friendly physical, social and economic development. It has seven policy objectives. Hariyo Ban Program has internalized these seven policy objective in its formulation. It strives to build capacity to adapt to climate impacts, build resilience through improved forest and biodiversity management, enhance forest carbon stock through REDD+ activities and above all, generate knowledge for climate sensitive green development policy innovations.

National Adaptation Program of Action (NAPA): Synthesis Report on Forest and Biodiversity, 2010 report has identified many climate impacts on forest and biodiversity that are likely to have serious implications on livelihoods of forest dependent people. Its findings are based on literature review and stocktaking of forestry sector, multi-disciplinary participatory vulnerability assessment in the representative areas of Koshi, Gandaki and Karnali basins and experiences of experts involved in the sector. It provides a range of adaptation actions most of which form the basis of Hariyo Ban program intervention on climate adaptation.

Hariyo Ban Program's specific climate change adaptation activities e.g. planning and implementation of CAP and LAPA will follow the general guidelines provided by NAPA. However, specific CAP and/or LAPA activities planned in case of different sites are likely to generate direct or indirect adverse impacts at local level. Specific mitigation measures based on the defined IEE conditions will have to be planned and implemented under such circumstances.

2.4 Compliance as per Multilateral Environmental Agreements (MEAs) of which Nepal is **a** signatory to

Nepal is party to twenty two different international/multi-lateral environmental agreements (MoEST, 2008). The most relevant conventions that merit an assessment in the context of Hariyo Ban Program are:

- 1) Convention on Biological Diversity (CBD), 1992
- 2) United Nations Framework Convention on Climate Change (UNFCCC), 1992 and the Kyoto Protocol, 1997 to the UNFCCC
- 3) Convention on Wetland of International Importance Especially as Waterfowl Habitat (Ramsar Convention) 1971
- 4) United Nation's Convention To Combat Desertification (UNCCD), 1994
- 5) Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) 1973
- 6) Plant Protection Convention, 1951
- 7) Plant Protection Agreement for Asia and Pacific Region, 1956
- 8) Convention concerning The Protection of World Cultural and Natural Heritage, 1972
- 9) ILO 169 Convention on Indigenous Communities and Tribal

Conservation of Biological Diversity (CBD), 1992 makes it obligatory for its country parties to i) conserve biodiversity, ii) take measures and ensure sustainable use of its components, and iii) ensure fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

CBD article 6 requires the country parties to integrate conservation and sustainable use as far as possible and as appropriate in all its sectoral and cross-sectoral policies, plans and programs. As per article 7, the country parties are obliged to identify components of biodiversity, monitor them, attend to those requiring urgent conservation measures, identify processes and categories of activities likely to have significant adverse impacts on biodiversity and monitor the effects of such impacts. Article 8 emphasizes on *in-situ* conservation of biodiversity from species to ecosystem level adopting all possible measures and mechanism. Article 10 emphasizes on all possible measures to be taken to promote conservation and sustainable use through impact abatement, development efforts and improvements in customary use practices.

Biodiversity conservation at species, genetic and ecosystem level is a major program component of Hariyo Ban. It strives to implement the provisions made especially in articles 6 to 10. Program activities are categorically selected to reduce all possible threats to floral and faunal biodiversity at community of species, ecosystem and landscape level.

Hariyo Ban program has program activities for the conservation of all major faunal species protected under the NPWC Act and also listed in the *IUCN RED List of Endangered Species* including Tiger, Rhino, Elephant, Black buck, Wild Water Buffalo, Snow Leopard and many more. These major species are also the indicators of the good health of habitats and ecosystems. Maintenance of population of these species therefore also indicates the improved protection status of other national protected and IUCN red-listed flora and fauna.

United Nation's Framework Convention on Climate Change (UNFCCC), 1992 aims at achieving stabilization of greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, and ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner. As per article 4 (1), country parties must take diverse programmatic measures to mitigate the climate change impacts.

Despite the fact that Nepal's contribution in GHG emissions is almost negligible, climate change has emerged as a major threat to its people and biodiversity. As an Annex 1 country party, Nepal faces acute vulnerabilities specially in agriculture, forests, water, energy, health and overall in livelihoods and economy. Nepal urgently requires take all possible measures both on adaptation and mitigation fronts to address climate change impacts.

Climate change adaptation is a major component of Hariyo Ban. It interfaces with biodiversity conservation and sustainable landscape management components to address climate change issues on land, flora and fauna, soil and water including associated poverty and vulnerabilities in its target landscapes. Program activities are specifically identified to raise awareness, build capacities at local community level to promote innovative and locally viable sustainable resource

use and management measures. As per the Kyoto Protocol article 2, Hariyo Ban program activities focus on most measures included under 1(a) and 3 contribute in Nepal's National Adaptation Program of Action (NAPA/MoEST, 2010).

The Copenhagen Accord, 2009 specifies the responsibilities and commitments of both the developed and developing nations as to how they would contribute in cutting deep on global emissions. Article 5 to 12 provide the role to be played by Annex 1 and Non-Annex 1 country parties in securing funding for REDD+, adaptation and mitigation and low emission development policies. Nepal is prepared to tap financing available to implement its NAPA. Accordingly, Hariyo Ban is one such slot under which piloting of REDD+, capacity building at all levels, and planning and implementation of CAPA and LAPA some major intervention support.

Ramsar Convention, 1971 (amended in 1982 and 1987) recognizes the fundamentally unique ecological functions played by river systems including the associated water bodies and wetlands as water regime and habitat regulators. Wetlands are the depository and evolution grounds for floral/faunal communities while they also constitute a resource of great economic, cultural, scientific and recreational values. Country parties are obliged to conserve their wetlands and associated flora and fauna, and promote wise and sustainable use of wetland resources through appropriate policy and programmatic innovations.

Nepal holds most of central and part of eastern Himalayas which have eight highest peaks of the world. Himalayas and the Tibetan Plateau form the water tower of Asia from where originate the key Asian river systems holding water bodies and wetlands of international significance. Hariyo Ban program activities are focused in part of Seti/Madi, Marsyangdi and Kali Gandaki river systems' watersheds and smaller watersheds and wetlands in TAL, integrating adaptation to reduce human vulnerabilities, maintenance of ecosystem services and biodiversity conservation. Compliance of program with the Ramsar convention is clearly visible.

United Nations Convention to Combat Desertification (UNCCD), 1994 aims at combating desertification and mitigating draught in countries, through effective action at all levels in the framework of an integrated approach that is consistent with Agenda 21. The focus of convention lies in i) rehabilitation and improved productivity of land, ii) conservation and sustainable management of land and water resources leading to improved living conditions at community level. The convention consists of separate regional implementation appendices for Africa and Asia. In Asia it guides to plan and implement program of action in countries having highly diverse topography, biodiversity, land use and socio-economic conditions, heavy pressure on natural resources for livelihood, widespread poverty and constrained production systems. These conditions fit well in case of Nepal although Nepal at this stage is not facing any serious draught and/or desertification situation.

The Hariyo Ban program strives to i) institutionalize sustainable land, forest and water management at landscape level, ii) conserve biodiversity from species to ecosystem level and iii) instituting adaptation to climate change impacts – all geared towards addressing poverty, strengthening climate resilient livelihoods and achieving natural resources and associated biodiversity conservation. Program activities of all three components are logically integrated and local communities are at the center of implementation with due focus on their capacity building. This reveals a rationalized compliance of Hariyo Ban with UNCCD provisions.

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, 1973 - amended in 1979) aims at protecting the illegal trade of species presently threatened with extinction and/or likely to be so in near future or species which any country party identifies as being subject to regulation within its jurisdiction for the purpose of preventing or restoring its exploitation, and as needing the co-operation of other parties in the control of trade. The three appendices that provide the list of faunal and floral species based on the level of threat and risk of extinction they are subjected to forms the basis of this convention.

Some flag sheep species that face severe conservation threats in two landscapes of Hariyo Ban are Rhinoceros, Tiger, Wild Elephant, Red Panda, Snow Leopard, Himalayan Brown Bear and Dolphin. Additionally, a wide range of avifauna, herpetofauna and plant communities are also facing threat of extinction in these landscapes.

Hariyo Ban program is geared at strengthening the on-going efforts to control the illegal trade of wildlife and particularly to double the number of tigers by 2022. It plans to build local capacities and further expand the successful community-based anti-poaching units outside protected areas. These activities are fully in compliance with CITES.

Plant Protection Convention, 1951 (1979 amendments enforced in 1991, again 1997 amendments came to enforcement in 2005) aims at controlling pests and diseases of plants and plant products and in preventing their introduction and spread across national boundaries. Parties are obliged to adopt legislative, technical and administrative measures to implement the intent of this convention.

The International Plant Protection Agreement for Asia and Pacific Region, 1956 aimed more specifically for preventing introduction into and spread within the region the destructive plant diseases and pests. This agreement established a Regional Plant Protection Commission, and mechanism for certification, prohibition, inspection, disinfection, quarantine and destruction etc. were introduced for regulating trade of plants and plant products.

Hariyo Ban Program activities do not have any plans or provisions to importing any plant and/or plant products over the life of the project except for scientifically assessing the feasibility of introducing a biological control agent to eliminate some invasive plant species from the biodiversity hotspots in the targeted landscapes. "No likely adverse impact" of the biological

control agent and its compatibility with the native plants and animal community will remain the bottom line for such introduction. Hariyo Ban is supporting control of exotic invasive plant species e.g., *Pontederia crassipes* (Water hyacinth), *Eupatorium* and *Lantana* species (Banmara) which suppress the native plant communities and adversely impact on people's livelihoods.

Convention Concerning the Protection of World Cultural and Natural Heritage, 1972 aims to promote cooperation between country parties to protect the cultural and natural heritage of the world that are of outstanding universal values and must be conserved for present and future generations. Country parties are legally bound to undertake appropriate legal, scientific, technical, administrative and financial measures necessary for identification, protection, conservation and rehabilitation of their cultural and natural properties. They are obliged to refrain from any deliberate measures detrimental to such properties within and outside their territories.

Within the TAL, lie a Natural Heritage Site, the Chitwan National Park (CNP) site and a Cultural Heritage Site, Lumbini – the birth place of Lord Budha. Under biodiversity component, Hariyo Ban Program activities focus on reducing threats to the iconic mega fauna e.g. Royal Bengal Tiger, One-horned Rhinoceros and the Asiatic Wild Elephants due to poaching, technical and scientific support for conservation especially for the rapidly on-going terrestrial and wetland habitat destruction due to invasion of alien species. Program activities support the GoN and complement its efforts towards the fulfillment of country's commitment as a party to the World Heritage Convention.

ILO Convention 169 on Indigenous Communities and Tribal Peoples is an international instrument dedicated to improving the living conditions of Indigenous peoples worldwide. Enacted in 1957 and revised and renamed in 1989, this convention recognizes Indigenous Peoples' right to self-determination within a nation state, while setting standards for national governments regarding Indigenous Peoples' economic, socio-cultural and political rights, including the right to land base and natural resource use. It has 44 articles organized in ten categories that outline the minimum standards of the rights of the Indigenous peoples. These articles among other things enable the Indigenous peoples "to exercise control over their own institutions, ways of life and economic development and to maintain and develop their identities, languages and religions, within the framework of the states in which they live". The convention guarantees Indigenous peoples the right to participate in decision-making on activities that may impact their own societies and territories, such as natural resource extraction, while maintaining the integrity of their societies, territories and culture. It further recognizes their right to prioritize their own development needs (Article 7). The Convention calls upon the governments to uphold these rights and to recognize Indigenous peoples' unique historical and socio-economic position within the state and their integral connection to their territories, and protects them against displacement. It further guarantees Indigenous peoples' rights to equal and fair employment opportunities (Articles 20 - 23), rights to health care (Articles 25), and education (Article 27),

including education in one's own language (Article 28). Nepal ratified this Convention in 2007 and it got enacted since 2008.

As regards the Hariyo Ban Program, in the center stage of activities implementation remain the local program beneficiaries who engage in planning and implementation of SFM, biodiversity conservation and CC adaptation activities as per their socio-economic and cultural values and norms. Program respects the differences in resource use patterns guided by the ethnic and cultural diversity of the target beneficiaries. Multi-stakeholder, participatory and all-inclusive approach to decision-making in Hariyo Ban activities is institutionalized to respect and ensure the rights of indigenous communities in the intent of the ILO Convention 169.

3. Framework Environmental Mitigation and Monitoring Plan (FEMMP)

3.1 Features and structure of FEMMP

As per the IEE fact sheet of Hariyo Ban program, activities under all three program components were categorized as CE or NDC using a set of criteria provided by the CEQ regulations and procedures.

CE and NDC: Activities under all three program objectives e.g. TA, research, assessments, workshop, meeting, training, issue based discussions, policy analysis and formulation, dialogue and partnerships, documentation and information dissemination are not considered to have any adverse environmental/social impact and hence marked categorical exclusion (**CE**), and rest all activities are marked negative determination with condition (**NDC**) considering that they might have adverse impacts in case they are not in compliance with GoN's legal/institutional arrangements, relevant MEAs of which Nepal is a party to, and/or required compliance with USG congressional earmarks.

Environmental compliance assessment (chapter 2 above) provides a general compliance status of Hariyo Ban Program as per funding agency's requirements, national environment related legal/institutional provisions and Nepal's international environmental obligations. Mitigation measures need to be taken for the activities that are likely to have any kind of environmental and/or social impacts (site specific or wide spread, reversible or irreversible, significant or likely to be significant) as indicated by the basic minimum IEE conditions of the activities.

Hariyo Ban Program has altogether **41 NDC marked** specific activities (CC adaptation – 5, sustainable landscape – 14 and biodiversity conservation – 22) under 16 major categories of activity (CC adaptation 3, sustainable landscape 5 and biodiversity conservation 8) being implemented till program year 2. Most of these specific activities are likely to be repeated in year 3, 4 and 5.

This FEMMP is prepared for these 41 NDC marked activities. Any new activity planned in subsequent years and likely to have environmental/social impact will require prepare and implement FEMMP accordingly.

FEMMP should have three specific features:

- 1) Provide a framework and basis for translating the IEE and EA conditions (which often tend to be very general) into specific, implementable and verifiable actions;
- 2) Set out the indicators or criteria to be used to monitor whether the mitigation actions are i) being implemented, ii) effective and adequate;
- 3) Specify the parties responsible for implementing, monitoring, reporting and verifying the effectiveness of monitoring actions including time schedule;

The proposed FEMMP follows the structure provided by the ENCAP FACTSHEET Environmental Mitigation and Monitoring Plans (EMMPs) of the USAID. It is presented in the form of a matrix that incorporates the aforementioned three features in its structure as elaborated below:

- 1) **NDC marked activities** of the annual work plans of year 1 and 2 have been included;
- 2) **Potential environmental and/or social impacts** likely in case of each activity has been elaborated based on the existing experiences, relevant secondary sources and the compliance requirements as per existing legal provisions;
- 3) **Significance of potential adverse impact** has been assessed based on the field observation of selected activities under implementation, reactions of the target beneficiaries of the activities and a filled in impact scoring checklist from the field staff of all consortium partners;
- **4) IEE condition** has been elaborated considering the basic minimum requirements for mitigation through avoiding, minimizing, restoring and/or offsetting the potential adverse impacts;
- 5) **Specific Mitigation Actions** provide the specific actions to be taken to meet/satisfy the IEE conditions;
- **6) Responsibility and schedule** as to who will implement the mitigation actions and when is specified;
- 7) Means of Verification (MoV) of the implementation of mitigation actions provides the indicators and criteria of whether the mitigation actions have been implemented;
- 8) Person responsible to monitor the effectiveness of monitoring action and timing specifies who will monitor whether the actions taken are proving effective and when;

3.2 Participatory Assessment of Significance of Impacts for inclusion in FEMMP Out of 41 NDC-marked specific activities (in 16 activity categories) of all three components:

• 19 specific activities were found not likely to have adverse environmental and/or social impacts

- 8 of these 19 activities however, needed to meet certain IEE conditions for implementation.
- 29 specific activities in total (including 8 mentioned above) needed to meet certain IEE conditions
- Activities under CC Adaptation component in general do not indicate any likeliness of significant adverse environmental and/or social impacts. At this stage however, it is not clear what activities will be included in site specific community and local adaptation plan of action (CAPA and LAPA). These plans are likely to have small construction works e.g. check dams, water conservation ponds, small levees and many other activities that potentially could have significant adverse environmental and/or social impacts. This includes potential downstream impacts. So the program will need to i) provide expert facilitation in site specific CAP/LAPA planning process as per the NAPA guidelines to ensure activities likely to have adverse impacts are avoided or replaced by appropriate environmentally sound alternatives, and ii) assess the potential adverse impacts of all activities included in those plans to find out whether they need to meet any specific IEE conditions and iii) plan and implement the specific mitigation actions accordingly through annual FEMMP.
- Out of 14 specific activities (in 5 activity categories)) in sustainable landscape component, six⁵ were considered likely to have **significant** adverse impact.
- Out of 22 specific activities (in 8 activity categories) in biodiversity conservation component four were considered likely to have **significant** adverse impact.

Ten specific activities (*refer to foot notes 4 and 5*) considered **likely to have significant adverse impact** needed a further in-depth understanding of the likely impact to justify the environmental assessment. For this purpose i) an Impact Scoring Checklist to be filled in by the consortium partner staff as a team at landscape level was developed; ii) field observation of the implementation of these activities and interaction with concerned community members was planned.

The impact scoring checklist allows for a participatory assessment of i) which element of environment/society is likely to be affected; ii) what is the a) nature, b) time scale, c) magnitude/intensity, and d) probability of occurrence of the impact, and iii) whether the mitigation will be required.

A team of landscape level consortium partner staff undertook the participatory impact assessment of relevant activities in both landscapes (refer to Annex 3). Most activities (*listed in*

⁵ biogas, ICS, fire line maintenance, nursery construction, leasehold forestry and piloting of cardamom, ginger, turmeric etc. in CF:

⁶ species translocation and re-introduction, HWC mitigation, mechanism for biological control and cultivation of cardamom, ginger, turmeric, broom grass;

footnotes 4 and 5) considered likely to have significant adverse impact were found not likely to have significant adverse impact based on findings of field observation, interaction with beneficiaries and participatory assessment of significance of impacts.

Accordingly, the potential impact, IEE conditions, specific mitigation actions and other columns of the FEMMP have been further refined.

3.3 Monitoring Measures, Monitoring, Reporting and Feedback – Responsibility and Timeline

1) Monitoring Measures

The proposed FEMMP provides monitoring measures for all 29 activities for which certain IEE conditions have to be met. Monitoring measures are of four distinct characteristics e.g.,

- i. Activities screening guidelines to be used by the consortium partner staff in the field
- ii. User's guidebook/guidelines
- iii. Reports: assessments, periodic field reports by consortium partner team leaders/field staff
- iv. Community and/or CFCC minutes

2) Mitigation Actions Implementation and Reporting Responsibility *CC Adaptation component*

- Thematic coordinator is exclusively responsible for 2 activities and jointly with landscape coordinator for another 2 activities;
- Landscape coordinator together with relevant consortium partner field staff is responsible for 4 activities;

Sustainable Landscape component

- Thematic Coordinator is exclusively responsible for 4 activities and jointly with landscape coordinator for 2 activities;
- Landscape coordinator jointly with consortium partner staff is responsible for 8 activities and with thematic coordinator for 2 activities;
- In case of one activity, CoP or DCoP is responsible jointly with thematic and monitoring coordinators;

Biodiversity Conservation component

• Thematic coordinator is responsible for 9 activities exclusively and jointly with landscape coordinators;

- Landscape coordinator jointly with consortium partner staff is responsible for 3 activities;
- **↓ Timing of the implementation of mitigation actions** basically is proposed to coincide with planning and implementation of the concerned program activity itself.
- **Reporting responsibility** lies with whoever is primarily responsible for implementing the mitigations action in tandem with the activities implementation;
- **↓ Timing for reporting** is proposed to be the same as regular progress reporting of the program activity. However, in special circumstances immediate reporting is advised to seek advice/instructions as required.
- **♣ Responsibility of providing timely feedback on reporting** lies basically with immediate supervisors and more generally with the landscape and thematic coordinator whoever has been reported on mitigation action implementation status;

4) Monitoring the effectiveness and adequacy of mitigation actions and timeline

- In general, concerned thematic coordinators in collaboration with monitoring coordinator and/or his/her team is responsible for monitoring the effectiveness and adequacy of mitigation actions;
- For the mitigation actions to be implemented in the field by all consortium partner staff, the landscape coordinator is responsible for providing guidance, supervise and monitor the effectiveness of the implementation of mitigation actions in a planned manner and report to the thematic and monitoring coordinator in the program office accordingly;
- For the mitigation actions to be implemented from the program office, CoP and DCoP is proposed to follow up with and guide the concerned thematic coordinators and monitor the effectiveness of mitigation actions;
- Timing for monitoring the effectiveness and adequacy of mitigation actions should remain flexible in general however, should coincide with the reporting of implementation status.

3.4 Budget Estimation for FEMMP Implementation

1) CC Adaptation component

• Proposed specific mitigation actions in all four activities are in-built in to the activities themselves. Hence no additional fund is required to implement the FEMMP provisions.

• However, owing to the special attention required to ensure the activities implemented are mitigation sensitive, and to supervise and monitor the compliance, additional staff time involvement is likely to cost funds.

2) Sustainable Landscape component

- Seven specific activities⁷ do not seem to need additional funds for implementing mitigation actions.
- Five specific activities⁸ need to have guidelines to be used by the field staff, service providers and/or the beneficiaries to ensure potential adverse impacts are avoided as per the FEMMP provisions. This is likely to cost additional fund either in the form of staff time or consultant's input or both in some cases.

3) Biodiversity conservation component

- 9 out of 22 specific activities do not require any mitigation actions as no adverse impact of these activities is noted likely.
- Mitigation actions in case of activities e.g., species re-introduction in alternative habitat and wetland restoration are also not likely to cost additional funds since the former activity requires to abide by the IUCN species re-introduction guidelines and the later requires to abide by the Ramsar guidelines for wetlands restoration.
- Mitigation actions for 5 specific activities⁹ require development of screening checklists for each one of them. Most of these checklists require be simple and could be developed and approved internally. They might however, require additional staff time or could be outsourced. In either case they would require additional funds.
- In case of biological control of IAPS, field testing of the biological control agent is likely to cost additional funds.

Estimation of additional budget as explained in this sub-section is proposed to be done jointly with relevant staff member of the program office as unit costs for staff and consultant involvement and other costs would need to be estimated as per the norms of the program.

⁷ They are FC inventory training, support to AEPC and BSP, nursery establishment, plantation support, CFOP revision, developing 2nd gold standard biogas, and biogas PDD validation

⁸ They are biogas promotion, fire line maintenance, support to reduce D and FD, leasehold forestry promotion, piloting of cardamom, turmeric and ginger cultivation in CF

⁹ They are bamboo based handicraft, agro-enterprises and swertia cultivation promotion, IGAs and sub-watershed management activities

4. Mechanism for Effective Implementation of FEMMP

Existing program implementation mechanism reveals that:

- Program implementation follows an annual work plan developed in a participatory manner jointly with stakeholders/beneficiaries and consortium partner staff at landscape and central level;
- Some activities e.g. policy, research, assessments, studies, capacity building are implemented
 directly from program office in Kathmandu. Field level activities are implemented by
 consortium partners and by other partners including GoN agencies and beneficiary/users
 committees with the technical and funding support from relevant consortium partners and
 their field staff, and selected service provider companies, CFCCs and NGOs in coordination
 with Landscape office;

Proposed mechanism for the implementation of FEMMP

- **Prepare annual EMMP** at landscape level for site level specific activities included in the FEMMP with specific mitigation actions recommendation to meet the elaborated IEE conditions. The program office will ensure EMMP is prepared at landscape level and funding is made available for its implementation.
- **Link** the planning and implementation of annual EMMP with that of annual work plan including the responsibility, timeline, budget etc. as is practiced for annual work plan.
- Responsibility of implementing the relevant EMMP actions should remain with the consortium partner/staff and other partners responsible for implementing the activity with which the specific mitigation action is associated.
- Ensure annual EMMP implementation is in synergy with annual work plan implementation.
- Backstop the EMMP implementation and monitor as done in case of annual work plan with clear responsibility and timeline specified in FEMMP and annual EMMP. Participatory monitoring at community level and progress monitoring at landscape level consortium partners' and program level staff is proposed to remain the same.
- **Report the status of EMMP implementation** together with that of annual work plan progress reporting;
- Thematic coordinators together with landscape coordinators as applicable will be responsible for monitoring the effectiveness and adequacy of mitigation actions as per FEMMP

- At the sub-IR and IR level the effectiveness monitoring of randomly selected mitigation actions should be done and/or cross-checked by the M&E coordinator/unit on quarterly basis.
- Environmental compliance reporting should be done together with quarterly/periodic progress reporting by the M&E unit based on the assessment of the incoming EMMP progress/monitoring reports from two landscapes and component coordinators including the findings of unit's own effectiveness monitoring missions.

5. Mechanism for Effective Coordination among Consortium Partners **Existing Coordination mechanism**

For smooth implementation of the program, both landscapes have landscape level offices in the leadership of a landscape coordinator. Additionally, each consortium partner has a team of field staff led by a team leader. Once the joint annual plan is finalized, the landscape level activities are implemented by respective consortium partners' landscape team, and their team leaders report on quarterly basis directly to the M &E coordinator at Hariyo Ban Program office.

CHAL: as a landscape is new for all consortium partners however, NTNC, FECOFUN and CARE have been working in most districts and places of this landscape since long. Hariyo Ban is on its way to developing an in-depth understanding of river basins, watersheds and subwatersheds for desired level of intensive and sustainable impact in CHAL. So Hariyo Ban consortium partners are working to establish an appropriately efficient coordination mechanism and develop synergy in activities implementation through:

- Monthly, quarterly and bi-annual coordination meetings, frequently at site levels and occasionally at river-basin and landscape levels to review and plan the implementation of activities:
- Staff from all consortium partners remains in informal contact with each other to share and support each other on programmatic matters as and when required;

Nevertheless, some areas of improvement suggested here should be considered for effective coordination and communication, e.g.:

- ♣ The landscape office should receive all partners' quarterly progress related data/information from the program office for documentation and follow-up purposes. The reason being it does not exist in loop of consortium partner team leader's quarterly progress reporting. This poses limitations in timely coordination and communication;
- ♣ FECOFUN has been given the responsibility from WWF of promoting biogas in CHAL. However, the field staff during consultation in Gorkha informed the consultant that all consortium partners are involved in all program activities in different sites though they avoid

possible activity overlap in same community. Whatever be the case, the knowledge of program implementation responsibility and coordination mechanism must be uniform among field staff of all consortium partners;

♣ Involvement of different facilitating agencies in one single activity also bears the risk of creating confusion among target beneficiaries. Facilitating agencies involved in biogas for instance are CFUG, local cooperative, a biogas company and one consortium partner at local level and the program office, AEPC and BSP from central level. Biogas companies are said to have often not performed according to the given responsibility, and have refrained from being accountable to their clients – the biogas installing households. These aspects need timely correction.

In TAL: WWF Nepal has been working since well before Hariyo Ban program kicked off. Hariyo Ban Program is one out of many other projects being implemented by WWF in TAL. The buffer zones around protected areas have well established buffer zone committees (BZCs). BZC is the apex body of BZCFUUGs that works as their moderating agency. A buffer zone development plan is prepared and implemented in close coordination with concerned park authorities. Coordination for Hariyo Ban Program in this case has got integrated within the existing program delivery mechanism of protected areas and buffer zone program implementation. As regards other contiguous forest corridors where Hariyo Ban Program is being implemented, there exist institutionalized community forestry coordination committees (CFCCs). These CFCCs take lead in joint/coordinated annual planning of Hariyo Ban activities, coordinate among the CFUGs and community based anti-poaching units, locally active youth clubs and other NGOs for the cause of conservation and development. They also coordinate with district level government and development agencies on behalf of CFUGs. WWF and CARE provide funding to CFCCs for selective activities in certain districts based on contracts signed as per annual work plan, and their field staff provides technical assistance at target beneficiary's level. Working through CFCCs in TAL is considered to have advantages at least from three different perspectives:

- It is claimed to have contributed in fostering good governance at target beneficiary's level:
- The roles of supporting consortium partners is clear as they involve in providing technical assistance;
- This modality is claimed to be effective in keeping local stakeholders well informed and target beneficiaries empowered.

Proposed mechanism for improving coordination and communication among consortium partners

- Institutionalize a simple quarterly progress reporting, progress review and sharing meeting mechanism at landscape level program office. This is expected to increase the effectiveness of sharing, learning, joint monitoring and progress reviewing processes at landscape level;
- Ensure the regularity and consistency of existing site and river-basin level periodic coordination meetings;
- CFs in hilly areas are functioning in isolation with each other despite the fact that all CFs located in one sub-watershed hold ecological similarities and huge potentialities of economy of scale deemed crucial for business oriented scientific management of forest and associated resources. Future of CF management lies in maximizing the productivity of all natural resources based products and services available from CF areas, and creating niche for community-private partnership in developing green economy. Such a strategic orientation of CF management is possible through:
 - o Networking of CFUGs in identified sub-watersheds,
 - o Enabling them develop and implement a joint strategic periodic plan for all CFs in single sub-watershed. Such a strategic plan should be geared at making the maximum out of the existing ecological similarity and potentiality of the existing economy of scale.

Although the district and range post level FECOFUN chapters are in place to move CFs in a sub-watershed in this direction, they are neither oriented nor seem to have desired motivation to do so. Moreover, CFUGs located in one sub-watershed are better placed to realize their common strength and potentiality and get motivated to move in this direction.

- Consider exploring possibilities of institutionalizing something similar to CFCC at least as a pilot program in identified sub-watersheds of CHAL as it fits well with the integrated outcome of its three components (SFM, REDD+, adaptation, biodiversity conservation, watershed resilience and over all the livelihoods improvement). This is expected to not only increase the effectiveness of coordination and communication in immediate term, but also create a niche for consortium partners to plan and work towards sustainable landscape management even after the phasing out of the Hariyo Ban Program.
- Involvement of all consortium partners in all program activities even though in different sites involves differences in modality of assistance. This is likely to cause confusion at beneficiary's end. It also bears the risk of unintended competition among field staff while they need to cooperate with and support each other. Effective coordination demands clarity in roles of all players perceived at the client's end as well.
- Organization of at least two landscape level team building workshops every year for consortium partner staff with focus on enhancing coordination, and the quality and standard

of program delivery is expected to contribute in fostering and maintaining enhanced communication and coordination:

6. Training Needs and Training Package Associated with Planning and Implementation of FEMMP

Majority of consortium partner field staff have natural resources management background. They have a basic understanding of the inter relationship between forest, soil, water, and human wellbeing. Most of them have basic knowledge of vulnerabilities induced due to changing climatic trends and their impact on forest, aquatic and agro ecosystems and people's livelihoods¹⁰.

The desired level of knowledge and skills for them in this case will be impact assessment and mitigation planning. They need to learn the concepts of impact of management interventions, mitigation and approaches to mitigation planning and monitoring. They also need to demonstrate the ability to interpret and analyze the relevant environmental policies, acts and regulations as regards impact identification and environmental assessment. And they also need to demonstrate the skills of mitigation and monitoring planning and implementation.

A five-day training package is proposed below to address the afore-mentioned training needs. This package could be adjusted and reduced to a three-day program based on availability of time and resources.

It is recommended to circulate the training package two weeks in advance to the potential participants and request them to suggest if the training package will help them develop EMMP or they would like to subtract and add some topics to be able to prepare and implement an EMMP. The training content could then be adjusted to a possible extent depending on the available time and resources.

It is proposed that this training be organized during the annual work planning exercise at landscape level. This will provide an opportunity to the landscape level team of field staff with technical background to engage in a hands-on exercise of preparing the EMMP of the annual work plan they engage in preparation.

¹⁰ Refer to the report on Findings of the field visit provided separately

Proposed Training Package

Training on Environmental Assessment, and Mitigation and Monitoring Planning (A 5-Day Course for Hariyo Ban Program Consortium Partners' Field Staff)

Training Objective: To prepare the consortium partners' field staff to undertake impact assessment of Hariyo Ban activities, and prepare and implement annual Environmental Mitigation and Monitoring Plan (EMMP)

Learning Objective: The participants will be able to:

- 1) Explain the a) concept of environmental effects and their assessment with respect to development interventions; b) concept , principles, hierarchies and approaches of mitigation, c) concept of mitigation planning and monitoring the mitigation action including criteria and indicators;
- 2) Demonstrate the knowledge of Nepal's environmental policies, acts and regulations with respect to environmental assessment and mitigation
- 3) Develop an EMMP of the annual work plan of Hariyo Ban Program or Demonstrate the skills of developing the EMMP of an annual work plan of an NRM and biodiversity intervention;

Training Content

- Nepal's natural resources related policies and strategies -forests, biodiversity, wildlife, water, climate change agriculture, tourism; Environmental policies e.g. climate change, environment protection acts, regulations and quidelines;
- 3. Mitigation concept, purpose, main elements, principles of mitigation application, framework for systematic identification of mitigation measures,
- 4. Mitigation and monitoring planning Determinants of effective mitigation and monitoring (e.g., targeted, preventive, realistic, implementable, adequacy of funds etc.), defining IEE conditions, selecting mitigation actions, defining indicators of implementation, defining indicators of effectiveness of mitigation actions, clarifying responsibilities of implementing mitigation actions and monitoring the implementation, clarifying responsibilities of monitoring the effectiveness and adequacy of mitigation actions
- 5. Hands-on exercise on preparation of annual EMMP of field site level activities that need mitigation actions.

7. Environmental Compliance Reporting Arrangements

The IEE FACT SHEET for Hariyo Ban Program provided by the USAID (page 26, point 4) states that "...... the recipient will employ a qualified, MEO-approved, part-time environmental impact professional (EIP) who will assess and recommend environmental actions for each planned activity under each objective that falls within the NDC category and will coordinate implementation of mitigation measures, monitoring and reporting. The EIP, with support and guidance from designated AOTR, will complete the 'Environmental Assessment Checklist (EAC), provided in Annex 1 for all specific activities with their potential impact on

environment and recommend possible mitigation measures. This checklist will be shared with field staff and followed while implementing activities in the field."

The consultant in this case understood as the EIP, has prepared and submitted the FEMMP for Hariyo Ban Program with this report. This FEMMP contains the three basic elements of EAC mentioned in annex 1 of IEE fact sheet e.g., i) planned activities, ii) potential adverse environmental/social impacts, and iii) recommended mitigation measures. This FEMMP is subject to approval by concerned authorities. After approval, annual EMMP will have to be prepared, resourced and implemented as indicated in the text underlined above. It is evident that it is too early to prepare an environmental compliance report at the FEMMP preparation stage.

In the context of environmental compliance, the IEE fact sheet (page 31, paragraph iii) states that "The environmental compliance status of the project will be prepared periodically during the implementation by means of routine site visits by the EIP, AOTR and other responsible USAID staff. Any required correction in the implementation will be made on the basis of these findings and in accordance with the environmental guidelines. A sample Environmental Assessment Compliance Checklist for this purpose has been provided in Annex – 2." This statement further clarifies that an environmental compliance report is neither expected nor possible at this stage.

The Hariyo Ban Program cooperative agreement (page 8, point 8) further clarifies that "an environmental compliance report should be a regular feature of the quarterly progress reporting".

On the above grounds the consultant suggests that once the FEMMP is approved, an EMMP of the current fiscal years AWP be prepared, resourced and implemented. The next step will be to compile the implementation status of EMMP, verify and report together with the periodic progress report. This could be done either by the M&E unit or by procuring the services of a part-time consultant EIP as mentioned in the IEE fact sheet (page 26, point 4).

9. References

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- 5. INITIAL ENVIRONMENTAL EXAMINATION FACT SHEET For HARIYO BAN Program , USAID NEPAL
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- 7. HARIYO BAN Program FY1 2012 Annual Work Plan
- 8. HARIYO BAN Program FY 2 2013 Annual Work Plan
- 9. List of Hariyo Ban Year II Program Activities categorized NDC
- 10. MCC/USA, 2007: Guidelines for Environment and Social Assessment. Guidance for Compact Eligible Countries, 2007, Reducing Poverty through Growth, Millennium Challenge Corporation, USA
- 11. Nepal Environment Protection Rules, 1997
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- 13. Bhatta, R and Khanal S.N. (2009): Environmental Impact Assessment System in Nepal: An Overview of Policy, Legal Instruments and Process; Kathmandu University Journal of Science, Engineering and Technology, Vol.5, No. II Sept. 2009.
- 14. The Glacier Trust, 2012: Forest Conservation and Improved Cooking Stoves Program, phase 2 Interim Report.
- 15. www.encapafrica.org: Principles of Environmental Mitigation and Monitoring. USAID staff Environmental Training, Tanzania, 2008
- 16. www.gov.bc.ca/emv/emop: Procedures for Mitigating Impacts on Environmental Values. Working Draft, 2012
- 17. All relevant International/Multilateral Environmental Agreements/Conventions/Accords mentioned in this report downloaded and reviewed from websites.
- 18. Hariyo Ban Program related relevant documents e.g.,
 - 1. Hariyo Ban Nepal Ko Dhan Program RFA 367-11-000001Technical Application
 - 2. WWF- Hariyo Ban Award Final, 2011
 - 3. Hariyo Ban Program Year 1 Annual Work Plan, 2012
 - 4. Hariyo Ban Program Year 2 Annual Work Plan, 2013
 - 5. Hariyo Ban Program, Monitoring and Evaluation Plan, Revised version 2012

Environment Protection Rules, 1997 Schedule -1 (Pertaining to Rule 3): Forestry Sector Proposals Requiring IEE

- 1) Plantation of indigenous plants of a single species in a single block of 50 to 100 hectares in the Terai and 25 to 50 hectares in the Hills.
- 2) Plantation of such imported species of plants as are deemed suit for the purpose, following their test in the concerned place, on a single block of 10 to 50 hectares in the Terai and 5 to 25 hectares in the Hills.
- 3) Handover of forests with an area ranging between 25 to 100 hectares in the Terai and 5 to 25 hectares in the Hills as leasehold forests.
- 4) Clear feeling or rehabilitation of national forests with an area of not more than 5 hectares.
- 5) Establishment of saw-mills which has capacity to process 5,000 to 50,000 cubic feet of timber per year.
- 6) Collection of 5 to 50 tons of forest products other than timber per year.
- 7) Establishment or expansion of national parks, wildlife sanctuaries and conservation areas or environmental conservation Zones.
- 8) Coppicing shoots of foots of trees which have been felled, removal of leaves (in such a manner as to turn trees into stumps), extraction of seeds of lichens or orchids from trees and collection of Sal (*Shorea robusta*) seeds.
- 9) Formulation of watershed management plans.
- 10) Construction of new botanical gardens or zoos outside the forest areas by the public or private Sector.
- 11) Recruitment of import who of different species Not clear in official reference.
- 12) Preparation of management plans of national parks, wild life sanctuaries, conservation Ares and their buffer zones or launching of development and construction activities specified in such plans.
- 13) Establishment of medicinal herbs centers for the commercial production of medicinal herbs and aromatic plants in public scrublands.
- 14) Commercial collection or industrial processing of non-polluting medicinal herbs and aromatic plants.
- 15) Construction of forest paths up to Five Kilometer long and of fire protection lines up to Ten Kilometers long.
- 16) Collection of boulders, gravel and sand and extraction of coal and other minerals from forest areas.

Schedule 2: Forestry Sector Proposals requiring environmental Impact Assessment (EIA)

1) Plantation of indigenous plants of a single species in a single block covering an area of more than one hundred hectares in the Terai and fifty hectors in the Hills.

- 2) Plantation of such imported species of plants that are deemed suitable for the purposes, following their test, in the concerned place, in an area of more than fifty hectares in the Tarai and Twenty Five hectares in the Hills
- 3) Handover of forests with an area of more than one hundred hectares in the Terai and twenty five hectares in the hill as leasehold forests.
- 4) Clear felling or rehabilitation of forests with an area of more than five hectares.
- 5) Establishment of saw-mills processing more than fifty cubic ft. of timber per year.
- 6) Collection of forest related products except more than fifty ton of woods.
- 7) Formulation and implementation of forest management plans.
- 8) Clearing of public forests and establishment of new medical herbs center for commercial production.
- 9) Rosin and turpentine, rubber, plywood and veneer, catechu, and timber-based matches, pulp and paper industries to be established within one kilometer inside the forest area which depend on forests for their raw material, and use processing techniques, and cardamom and medium and large tea industries which use large quantities of firewood.
- 10) Commercial and industrial processing of medicinal herbs and aromatic plants which emit garbage and pollution.
- 11) Establishment of saw-mills, bricks and tiles factories and tobacco processing industries within five kilometers from the forest boundaries.
- 12) Establishment of hotels, resorts, safaris, educational institution, hospital and industries of other construction activities inside forest areas, national parks, sanctuaries, conservation areas, buffer zones and environment conservation Zones.

ANNEX 2: IMPACT SCORING CHECKLIST AND FILLED IN CHECKLISTS

Impact scoring checklist

(To be filled in by program and consortium staff in the field)

- This checklist is to be filled in for only those activities that are likely to have significant adverse impact on environment and/or society requiring mitigation measures.
- Program/Consortium Partners staff are requested to kindly take time out and fill in this checklist for the activities listed for potential adverse impact

Landscape:	Site:
Responsible Implementing staff/partner	

Planned Activity	Potential Effects	Affected	Time scale	Magnitude	Probability of Occurrence	Mitigation
Activity 1			Short term or Permanent	Local or wide spread	Low, medium or high	Yes or No
	Effect 1	Human being				
	Effect 2	Flora/fauna				
	Effect 3	Soil and air				
	Effect 4	Water/wetlands				
	Effect 5	Ecosystem processes/functions				
	Effect 6	Physical infrastructure				
	Effect 7	Gender and social aspects				
	Effect 8	Other indirect/secondary impact				
Activity 2						

1. Impact scoring checklist filled in

(To be filled in by program and consortium staff in the field)

Landscape: Terai Arc Landscape Site: Chitwan

Responsible Implementing staff/partner: WWF

Planned Activity	Potential Effects	Affected	Time scale Short term	Magnitude Local or wide	Probability of Occurrence Low,	Mitigation Yes or No
			or Permanent	spread	medium or high	
Grants to local						
communities for biogas	Creates hassles	Human being	Short term	Local	Medium	Yes
plant establishment	Fodder highly needed	Flora/fauna	Permanent	Local	Medium	Yes
in CHAL	NA	Soil and air	NA	NA	NA	NA
(650), Toilet construction	Water requiring plant	Water/wetlands	Permanent	Local	Low	No
support in TAL (1500)	Pressure on forest for fodder	Ecosystem processes/functions	Short term	Local	Low	Yes
	NA	Physical infrastructure	NA	NA	NA	NA
	Women work load increased	Gender and social aspects	Short term	Local	Medium	Yes
	NA	Other indirect/secondary impact	NA	NA	NA	NA
ICS, smoke						
hood/metal sotve, iron	Less cost effective	Human being	Short term	Local	High	Yes
prayer flag establishment	Decreased in forest density	Flora/fauna	Permanent	Wide spread	High	Yes
support	Soil degradation and low air quality	Soil and air	Permanent	Wide spread	High	Yes
	NA	Water/wetlands	NA	NA	NA	NA
	It has negative impact on forest ecosystem	Ecosystem processes/functions	Permanent	Wide spread	High	Yes
	NA	Physical infrastructure	NA	NA	NA	NA
	Work load to women	Gender and social aspects	Short term	Local	Medium	Yes
	NA	Other indirect/secondary impact	NA	NA	NA	NA
Green	Work load	Human being	Short term	Local	Medium	Yes

Planned Activity	Potential Effects	Affected	Time scale	Magnitude	Probability of	Mitigation
rictivity	Litodis		Source		Occurrence	
			Short term	Local or wide	Low,	Yes or No
			or	spread	medium or	
			Permanent		high	
enterprise	increase					
development	Demand	Flora/fauna	Short term	Local	Medium	Yes
support	increase					
	NA	Soil and air	NA	NA	NA	NA
	NA	Water/wetlands	NA	NA	NA	NA
	NA	Ecosystem processes/functions	NA	NA	NA	NA
	NA	Physical infrastructure	NA	NA	NA	NA
	Women work load increase	Gender and social aspects	NA	NA	NA	NA
	NA	Other indirect/secondary impact	NA	NA	NA	NA
Ghariyal						
	NA	Human being	NA	NA	NA	NA
	NA	Flora/fauna	NA	NA	NA	NA
	NA	Soil and air	NA	NA	NA	NA
	NA	Water/wetlands	NA	NA	NA	NA
	NA	Ecosystem processes/functions	NA	NA	NA	NA
	NA	Physical infrastructure	NA	NA	NA	NA
	NA	Gender and social aspects	NA	NA	NA	NA
	NA	Other indirect/secondary impact	NA	NA	NA	NA
HWC						
mitigation	NA	Human being	NA	NA	NA	NA
	Narrow down	Flora/fauna	Permanent	Local	Low	Yes
	of wildlife					
	movement					
	NA	Soil and air	NA	NA	NA	NA
	NA	Water/wetlands	NA	NA	NA	NA
	NA	Ecosystem processes/functions	NA	NA	NA	NA
	NA	Physical infrastructure	NA	NA	NA	NA
	NA	Gender and social aspects	NA	NA	NA	NA
	Financial	Other indirect/secondary impact	Short term	Local	Medium	Yes
	burden for					
	regular					
	maintenance					
	of electric					
Mechanism for	fence					
biological	Effects on	Human hoing	Permanent	Wide spread	High	No
control	human health	Human being			J	
	Destroying of	Flora/fauna	Permanent	Wide spread	High	No
	Indigenous					
	plants as well					
	as other wild					
	animals		<u> </u>	1001	12.1	N.1
	Reduce the	Soil and air	Permanent	Wide spread	High	No
	quality of soil					
	and air	Waterburt	D	AA/Calaaa	18.4	NI-
	Destroying of	Water/wetlands	Permanent	Wide spread	High	No

Planned Activity	Potential Effects	Affected	Time scale	Magnitude	Probability of Occurrence	Mitigation
			Short term or Permanent	Local or wide spread	Low, medium or high	Yes or No
	aquatic animals and wetland ecosystems					
	Destroying of ecosystem functions	Ecosystem processes/functions	Permanent	Wide spread	High	No
	NA	Physical infrastructure	NA	NA	NA	NA
	NA	Gender and social aspects	NA	NA	NA	NA
	NA	Other indirect/secondary impact	NA	NA	NA	NA
Promotion of						
community	Effect 1	Human being				
managed tourism	Diminish wilderness of wildlife	Flora/fauna	Permanent	Local	Medium	Yes
	NA	Soil and air	NA	NA	NA	NA
	Effect 4	Water/wetlands				
	Forest ecosystem disturb	Ecosystem processes/functions	Permanent	Local	Medium	Yes
	Road damage	Physical infrastructure	Short term	Local	Medium	Yes
	Destroying of local culture	Gender and social aspects	Permanent	Local	High	Yes
	NA	Other indirect/secondary impact	NA	NA	NA	NA

Impact scoring checklist filled in

Landscape: Chitwan Annapurna Landscape Site:-----

Responsible Implementing staff/partner- Respective field staffs of consortium partner.

Planned	Potential	Affected	Time	Magnitude	Probability	Mitigation
Activity	Effects		scale		of	
					Occurrence	
Activity 1,			Short term	Local or wide	Low,	Yes or No
			or	spread	medium or	
			Permanent		high	
Fire line	Effect 1	Human being				
maintenance in	Effect 2	Flora/fauna	Short term	Local	low	Yes
CF	Effect 3	Soil and air	Short term	Local	low	Yes

	Effect 4	Water/wetlands	Short term	Local	low	Yes
	Effect 5	Ecosystem processes/functions	Short term	Local	1000	103
	Effect 6	Physical infrastructure				
	Effect 7	Gender and social aspects				
	Effect 8	Other indirect/secondary impact				
Activity 2	Effect 1	Human being				
Leasehold	Effect 2	Flora/fauna	Sort term	Local	low	Yes
		Soil and air	Short term			Yes
Forestry Development in	Effect 3	I .		Local	low	
CF	Effect 4	Water/wetlands	permanent	Local	low	Yes
CF	Effect 5	Ecosystem processes/functions	Short term	Local	low	Yes
	Effect 6	Physical infrastructure				
	Effect 7	Gender and social aspects	Short term	Local	low	Yes
	Effect 8	Other indirect/secondary impact				
Activity 3	Effect 1	Human being				
Piloting of	Effect 2	Flora/fauna	Sort term	Local	low	Yes
Cardamom,						
Turmeric,						
Ginger, Broom						
grass						
cultivation in						
CFUG to poor						
(leasehold						
forestry						
concept)						
	Effect 3	Soil and air				
	Effect 4	Water/wetlands	Short term	Local	low	Yes
	Effect 5	Ecosystem processes/functions	Short term	Local	low	Yes
	Effect 6	Physical infrastructure				
	Effect 7	Gender and social aspects	Short term	Local	low	Yes
	Effect 8	Other indirect/secondary impact				
Activity 4	Effect 1	Human being				
Green	Effect 2	Flora/fauna				
Enterprise	Effect 3	Soil and air				
development	Effect 4	Water/wetlands	Short term	Local	low	Yes
support	Effect 5	Ecosystem processes/functions	Short term	Local	low	Yes
	Effect 6	Physical infrastructure				
	Effect 7	Gender and social aspects	Short term	Local	low	Yes
	Effect 8	Other indirect/secondary impact				
Activity 5	Effect 1	Human being				
Promotion of	Effect 2	Flora/fauna	Sort term	Local	low	Yes
community	Effect 3	Soil and air	2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1.20
managed	Effect 4	Water/wetlands	permanent	Local	low	Yes
tourism	Effect 5	Ecosystem processes/functions	pormanent	Local	IOVV	103
	Effect 6	Physical infrastructure				
	Effect 7	Gender and social aspects				
	Effect 8	Other indirect/secondary impact				
	LIIEU Ø	other indirect/secondary impact				

ANNEX 3: CHECKLIST FOR INFORMATION GENERATION AT LANDSCAPE LEVEL

Method: Focus Group Discussion with a group of 8 field staff (two from each consortium partner field office) in each landscape

Planning, implementation, coordination and communication

- 1. Which partner implements which activities in landscape? How the progress is reported from field to partner's HQ and to Program Office?
- 2. How are the partners' field offices supported from their respective HQ/focal points and the Component Coordinators in the Program office? To whom do the field offices report on issues and achievements of annual plan implementation?
- 3. How do the partner staffs coordinate among each other and with the program office in course of annual plan implementation?
- 4. What kind of coordination and communication related issues/bottlenecks have surfaced up over the period, if at all and how have they been sorted out?
- 5. What the partner field staffs think should be done to improve the communication and coordination among consortium partners in the field as well as in the center?

Staff expertise field, environmental and social impacts related knowledge and skills, Willingness and time availability to prepare site specific mitigation plan and implement it.

- 6. Staff in each partners' field offices social science/natural science professionals
- 7. How much work load they think they have presently too much, manageable, not enough
- 8. Previous academic/training experiences of environmental/social impacts of development activities, CC impacts in each partner's team.
- 9. How many of them think they can assess the impacts of development activities and plan and implement the mitigation actions if they are asked to do so.

10. If they have a training opportunity, what they think they must learn to be able to identify potential adverse impacts of program activities on environment, biodiversity and human beings and plan/implement the appropriate mitigation measures?

1. Environmental Impact Scoring Matrix Filling in Exercise

This will be confined to activities that are likely to have significant adverse impact e.g. biogas, toilet, power fencing, species re-introduction, those the staff members think are likely to have adverse impact.

- 1) The consultant will circulate the matrix to group of staff gathered for FGD,
- 2) Explain each part of the matrix, respond to queries as they emerge in the group
- 3) Request them to score for the activities they are responsible to implement and identified as potential for significant impact.

2. Site visit and informal interaction with beneficiary group representatives/LRPs

Visit especially the sites that have activities identified as bearing the risk of having significant adverse impact. However, it would be even better to visit the places where more than one activity is being implemented.

Informal interaction with beneficiary group representatives especially on their awareness about the positive and negative impacts of activities could be useful.

ANNEX 4: THE FRAMEWORK ENVIRONMENTAL MITIGATION AND MONITORING PLAN (FEMMP) OF HARIYO BAN PROGRAM (Provided separately in a MS Excel file)

ANNEX 5: TERMS OF REFERENCE Terms of reference

Prepare framework environmental mitigation and monitoring plans and recommend overall mechanism of environmental compliance for Hariyo Ban Program activities

1. Background

The Hariyo Ban Program (HBP) is a 5 year program that aims to reduce adverse impacts of climate change and threats to biodiversity in Nepal. Its objectives are to:

- Reduce threats to biodiversity in target landscapes (Intermediate Result 1)
- Build the structures, capacity and operations necessary for effective sustainable landscape management, with a focus on reducing emissions from deforestation and forest degradation (REDD+) readiness (Intermediate Result 2)
- Increase the ability of targeted human and ecological communities to adapt to the adverse impacts of climate change (Intermediate Result 3).

Hariyo Ban has three cross-cutting themes: livelihoods, governance, and gender and social inclusion. It will operate in two overlapping landscapes (see map1):

Terai Arc Landscape in Nepal (TAL): stretching from the Bagmati River in the east to the border with India in the west.

Chitwan-Annapurna Landscape (CHAL): encompassing the Kali Gandaki river basin in Nepal.

The Hariyo Ban Program is being implemented by a consortium of NGOs: World Wildlife Fund (WWF) (lead), Cooperative for Assistance and Relief Everywhere (CARE), National Trust for Nature Conservation (NTNC), and the Federation of Community Forestry Users in Nepal (FECOFUN). The Government of Nepal (GoN) is a key partner and beneficiary of Hariyo Ban, as are local communities.

While most of Hariyo Ban's activities will have a strongly positive impact on the environment, there may be some that will have direct, indirect or cumulative negative impacts, in the short or long term, if mitigation measures are not planned in advance and implemented parallel to the activity itself. There may also be adverse social impacts from some activities.

To devise mitigation measures for activities having potential negative impacts on environment and society and ensure overall compliance of Hariyo Ban Program to both national and international environmental obligations, Hariyo Ban Program is commissioning this consultancy. The consultant needs to follow special procedures prescribed to Hariyo Ban Program by USAID. The consultant will be provided with relevant documents forwarded by USAID.

The consultant will prepare framework mitigation and monitoring plan for each category of activities that could have negative environmental and/or social impacts, and make sure that the plans so prepared are appropriate and sufficient to adhere to environmental compliance. The consultant will also recommend a mechanism for timely implementation and monitoring of the planned mitigation measures.

2. Objectives

Prepare framework environmental mitigation and monitoring plans and recommend overall mechanism in Hariyo Ban Program (between center and field; and among consortium partners) for sufficient and effective environmental compliance. Specific objectives of the work are:

- Review the annual work plan and prepare a framework environmental mitigation and monitoring plan (FEMMP) in collaboration with Hariyo Ban core team and consortium partners for each category of activities that might have negative environmental and/or social impact
- Recommend an overall mechanism between center and field for sufficient and effective implementation of mitigation measures, timely feedback, monitoring and reporting system
- Recommend effective communication and coordination mechanism among consortium partners for sharing their concerns, best practices and lesson learnt in environmental compliance
- Recommend a mechanism for ensuring environmental compliance of the activities under windows of opportunity funds

3. Supervision and Coordination:

The consultant will be supervised by Judy Oglethorpe, chief of party, Hariyo Ban Progam. Anjana Shrestha, Program Associate, Hariyo Ban Program, will be responsible for ensuring environmental compliance in Hariyo Ban Program and the consultant will closely work with her .The consultant will also closely work with all four consortium partner organizations (WWF, CARE, NTNC and FECOFUN) and members of the Hariyo Ban Program core team including:

Shant Raj Jnawali, Biodiversity Conservation Coordinator Keshav Khanal, Sustainable Landscape Coordinator Sunil Regmi, Climate Change Adaptation Coordinator Shikha Shrestha, Gender and Social Inclusion Coordinator Rajendra Lamichhane, Monitoring and Evaluation Specialist Dipesh Joshi, Program Officer, Grants and Internships

The consultant will also consult as needed with the Hariyo Ban Agreement Officer's Representative, USAID.

4. Activities/Methodology

The consultant will undertake the following tasks:

1. Review the annual work plans and IEE work to date by the Hariyo Ban Program team. This is to ensure that all activities in the three thematic

- components, plus cross-cutting and overarching activities that might have negative environmental and/or social impact are identified.
- 2. Group activities having potential for significant negative impact on environment and/or society into various categories. For each category, list all possible significant direct, indirect or cumulative negative impacts, in the short or long term.
- 3. Undertake brief field visit to TAL and CHAL to visit a selection of activities that may cause significant negative environmental impact.
- 4. Prepare a framework environmental mitigation and monitoring plan (FEMMP) for each category against the list of the potential significant negative impacts.
- 5. Recommend a mechanism between center and field staff for both TAL and CHAL and for all four consortium partners for
 - i. Sufficient and effective implementation of mitigation measures
 - ii. Bottom-up feedback mechanism
 - iii. Monitoring and reporting systems.
- 6. Recommend effective communication and coordination mechanism among consortium partners for
 - i. Sharing concerns in the processes/steps of environmental compliance
 - ii. Sharing best practices and lesson learnt
 - 7. Recommend a mechanism to be established for ensuring environmental compliance of the activities under window of opportunity
 - 8. Recommend any training that may be needed for Hariyo Ban core team or consortium partners in assessing and mitigating impact in accordance with both national and international environmental obligations.
 - 9. Estimate budget required for implementing mitigation and monitoring plan of each category of activity. Also indicate and estimate where addition of funds is needed for environmental compliance as prescribed by USAID
 - 10. Prepare environmental compliance report for submission to USAID and for use by Hariyo Ban Program and its consortium partner organizations.

5. Deliverables

S.N	Deliverable from the consultant	Due Date	Inputs from Hariyo Ban Program
1	Written inception report and presentation to Hariyo Ban Program	5 Days after signing contract	Hariyo Ban Program will provide comments on the inception report within 3 working days
2	Draft Report outline	Within 5 working days after inception presentation	Hariyo Ban Program will provide comments on the draft report outline within five working days
3	Field Visits to TAL and CHAL	Complete field visits within 10 days after submitting draft report outline	
4	Draft report presentation and submission to Hariyo Ban Program consortium partner organizations	within 7 days after completing field visits	Hariyo Ban Program will provide comments on the draft report within 5 working days
5	Submission of final report including all materials hard copy and electronic reports, publications, maps, web references etc obtained during the review	Within 10 days after draft report presentation & submission	
6	Prepare and submit environmental compliance report for submitting to USAID	Within 37 days after signing contract (environmental compliance report can be drafted parallel to the rest of the above mentioned steps)	

6. Duration and Time Frame

This consultancy will cover a period of 37 working days from the date of signing contract.

7. Branding and Marking

The consultant is required to follow branding and marking guidelines provided by Hariyo Ban Program

8. Consultant Expertise

The consultant should have expertise in the following areas:

- Practical experience in environmental and social impact assessment across several disciplines that are relevant to the activities of Hariyo Ban in biodiversity conservation, REDD+, climate change adaptation, livelihoods, governance, and gender and social inclusion, including small-scale infrastructure.
- Experience in preparing mitigation and monitoring plans.
- Experience in establishing mitigation and monitoring mechanisms for complex programs involving multiple partners.
- Sound knowledge of national and international environmental obligations applicable to Nepal.

9. Location

Kathmandu (centre) based with visits to CHAL and TAL

Framework Environmental Mitigation and Monitoring Plan (FEMMP) of Hariyo Ban Program (2011/12 to 2016/17) (Final)

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IR/ Sub	Activity CLIMATE CHANGE ADAF	Year	CE/ NDC	Potential Environmental/Social Impacts	Significance? Yes/No	IEE Condition	Specific Mitigation Actions	Person responsible to implement mitigation actions; Timing	MoV of implementation of mitigation actions	Person resp. for monitoring the effectiveness of mitigation actions; Timing
322	Prepare Climate Change Adaptatio									
0.2.2	Prepare Community Adaptation Plans		NDC	Adverse impacts likely due to inadequate vulnerability assessment, impact mapping and/or elite dominance, social/gender exclusion etc.; Potential impacts on downstream users and ecosystems from manipulation of river systems/water supplies; risk of maladaption;	YES on case to case basis	HB shall ensure integrated approach and technically sound (e.g., CVCA) methods are used within the framework of agreed principles and all inclusive, multistakeholder and consultative planning process as guided by NAPA	Develop standard training package to Include technical, institutional and process related elements; 2. Train responsible people to use integrated approach and differential impact assessment methods	Thematic Coordinator for 1); Landscape coordinator and consortium partner's staff for 2); Timing; whenever training is planned and implemented	i) Existance of Multi-stakeholder forum; ii) community minutes of CAP development process	Thematic/Monitoring Coordinator; Timing: whenever training is planned and organized
	Prepare Local adaptation plans		NDC	Adverse impacts likely due to inadequate vulnerability assessment and/or impact mapping; Elite dominance and social/gender exclusion etc. Potential impacts on downstream users and ecosystems from manipulation of river systems/water supplies; risk of maladaption;	YES on case to case basis	HB shall ensure integrated approach and technically sound (e.g., CVCA) methods are used within the framework of agreed principles and all inclusive, multistakeholder and consultative planning process as guided by NAPA	Develop standard training package to Include technical, institutional and process related elements; 2. Train responsible people to use integrated approach and differential impact assessment methods	Thematic Coordinator for 1), Landscape coordinator and consortium partner's staff for 2), Timing: Whenever training is organized.	i) Existance of Multi-stakeholder forum; ii) community minutes of LAPA development process	Thematic/Monitoring Coordinator; Timing whenever training is planned and organized
3.2.3	Support to implement Community	1,2				LID -b -ll i)bt itit -til				
	CAP Implementation with technical support from selected resource partners (IDE, ANSAB etc)	2	NDC	Adverse impacts likely in absence of i) adequate community capacity to implement CAPA, and/or ii)missing community ownership and governance	NO	HB shall ensure i) robust institutional structure, ii) capacity and skills and iii) and ownership of plan exist within communities to implement CAP	Design, plan and implement training fo	Landscape coordinator and consortium partner staff; Timing: In CAP development process	Existance of active community instituions and skilled community representatives	Thematic Coordinator, Timing: periodic field visits
	■ LAPA implementation	2	NDC	Adverse impacts likely in absence of i) adequate local capacity to implement LAPA, and/or ii) missing local level ownership and governance	NO	HB shall ensure i) robust institutional structure, ii) capacity and skills and iii) and ownership of LAPA exist at the local government level to implement LAPA	Design, plan and implement training fo	Landscape coordinator of consortium partner staff; Timing: In LAPA development process	Existance of active community instituions and skilled community representatives	Thematic Coordinator, Timing: periodic field visits
3.3.3	Monitor trends in climate variabili	1,2								
	as they affect human adaptation	2	NDC	No adverse impact likely	NO					
2	Sustainable Landscape Forest Carbon Inventory	е				T				
	training to LRPs including inventory works and purchase of local equipment (through consultancy)	1, 2	NDC	No any direct adverse impacts likely, some indirect impacts likely in case heavy tools are used	NO	HB Program shall ensure no heavy tools are used for inventory	In Consultant's ToR, categorically mention not to use heavy tools for FC inventory	Landscape/Thematic Coordinator	Training/field reports	Thematic Coordinator; Timing: during periodic field visits
2.3	Drivers of deforestration and fores		tion analy	Ized and addressed						
2.3.1	Address the drivers of deforestrati	1, 2	NIDC							
1.2.1 (bullet 3) included	Grants to local communities for biogas plant establishment in CHAL (650), Toilet construction support in TAL (1500)	2	NDC	No specific adverse environmental/social likely impact was observed in case of biogas in TaL (e.g., increase in no. of livestock, fodder and water demand, mosquito or pests or women's workload etc.). In CHAL area also in general no significant increase in livestock, mosquito or pest population or in women's workload was observed: However, in dry hilly areas of CHAL, seasonal scarcity of fodder and water for cleaning toilets seemed likely and biogas installer/users were rarely aware and skilled about how to manage/maintain biogas plant, toilet and slurry output and maintain clearnilness. A likely adverse social impact is increased no. of dissatisfied among acute poor unable to install and benefit from biogas.		Program shall ensure 1) Communities selected are not likely to face water scarcity in next 10 - 15 years particularly in CHAL; 2) biogas users are knowledgeable about environmental guidelines for instalation of biogas and toilets, 3) site/location specific mitigation actions are inbuilt with biogas/toilet construction; 4) biogas installers are motivated and supported for planting few tree/grass fodder species in their homesteads and bari lands.	1. Develop (or adapt from BSP) and provide a simple pictorial guidelines for biogas users that includes environmenal issues, health hazards and safety measures: 2) Institutionalize a system of site specific and feasibility-based biogas instalation procedure to ensure potential environmental/Social inequities are avoided/mitigated; 3) Innovate pro-poor approaches in biogas and toilet instalation support.	Thematic coordinator for 1); Thematic coordinator jointly with consortium partners in the landscape for 2): Landscape coordinator jointly with consortium partner staff for 3).	1) Printed guidelines in biogas user HHs: 2) Standardized biogas Installation Procedure used by field staff;	Landscape, Thematic and Monitoring Coordinators; Timing - periodic field visits
	Support to AEPC for subsidy to biogas plants and to BSP for biogas monitoring	2	NDC	Adverse impacts likely due to absence of 1) sound environmental evaluation of proposals 2) agreed basic minimum monitoring and reporting protocol	NO	HB shall ensure 1) AEPC uses standard/agreed screening guidelines for granting subsidie and 2) BSP applies mutually agreed standard monitoring protocol	Include in MoUs with i) AEPC and ii) BSP i) environmental screening of proposals prior to granting subsidie, and ii) agreed standard monitoring protocol	CoP/DCoP, Thematic and Monitoring Coordinators	Standardized 1) biogas subsidie approval guidelines; 2) Monitoring protocol	Landscape and Thematic Coordinators - periodic field visits
	Fire line maintenance in CF	2	NDC	Likely adverse impacts include soil compaction, erosion, sedimentation, habitat fragmentation, loss of natural communities, invasion of non-native plant species and/or obstructed flow of genetic resources and wildlife movement. Nevertheless field observation revealed that this activity is confined only to removal of mostly dry biomass and cleaning of bushes likely to cause fire hazard along the aiready existing forest block separater lines. This much of activity is not likely to create any signrificant adverse impact.	NO	Program shall ensure no green trees are felled and natural plant communities and undergrowth are not disturbed to a possible extent including removal of any non-native plant species along the already existing block separating firelines.	Develop and put in practice a simple guidelines for fireline maintenance. It should include general does and don'ts and mitigation actions for specific situations e.g. tree felling	Thematic Coordinator for guidelines; Landscape coordinator for fireline maintenance work; Timing - during planning of fireline maintenance	A simple guidelines for fire line maintenance available and being followed	Landscape and Thematic Coordinators, Timing: periodic field visits
		2	NDC	Health hazard likely in case if black carbon leakage		HB shall ensure ICS/energy efficient	Inprove the skills of selected community members through appropriate training to construct locally feasible, leakage proof and	Landscape coordinator and concerned consortium partner field	Feedback from CFCC and field staff's	Landscape Coordinators;

IR/ Sub- IR	Activity	Year	CE/ NDC	Potential Environmental/Social Impacts	Significance? Yes/No	IEE Condition	Specific Mitigation Actions	Person responsible to implement mitigation actions; Timing	MoV of implementation of mitigation actions	Person resp. for monitoring the effectiveness of mitigation actions; Timing
	Nursery establishment and strengthen the existing nurseries	2	NDC	Likely adverse impacts of nursery establishment include soil erosion, enhancement of water scarcity for nearby communities already facing shortage of water, risk of introduction of non-native weeds and contamination of natural water sources in the downstream.	NO	HB shall ensure best practice guidelines for site selection and raising plants in nursery is practiced	Put in practice the existing MFSC/DFRS - issued forest nursery guidelines	Landscape Coordinator; Timing - whenever and wherever a nursery is established	Periodic report from field staff and/or CFCC	Landscape Coordinators; Timing: periodic field visits
	Plantation support in deforested, degraded land and private land	2	NDC	Adverse impact likely in case of mono-culture and non-native species plantations	NO	HB shall ensure native species already existing in adjoining forest areas are planted	Promote mix plantation of native species that safeguard ecological conditions of the plantation site and also meet the livelihoods/income needs of local communities	Field staff of consortium partners; Timing while planning support for plantation	Nursery register, field staff report	Landscape Coordinators; Timing: periodic field visits
	Support to NRM Groups to reduce drivers of deforestation and Forest Degradation	2	NDC	The activity is too general to give a clue of likely adverse impacts. On-forest activities for reducing drivers of D&FD (e.g. properly planned grazing control, fuel wood, NTFPs, fodder and timber harvesting) are unlikely to have any significant adverse impact. Off-forest NRM activities (e.g., biogas, plantation of fast growing non-native species, forest-based IGAs) may have adverse impacts depending on the nature of activities.	NO	HB shall ensure activities planned to reduce drivers of D and FD are approved based on their social and environmental screening.	Develop and implement an environmental and social screening guidelines for activities proposed/planned to reduce drivers of D and FD based on existing good practices and innovative approaches	Thematic coordinator for activities screening guidelines; Timing: Once; Consortium partners and landscap coordinator for screening activities, Timing: Prior to providing support	Concerned partner's field staff's periodic progress reports	Landscape coordinator - periodic field visits
	Leasehold forestry development in CF	2	NDC	Adverse impacts likely in case cash crops and/or NTFPs cultivation uses chemical fertilizers and/or insecticides/pesticides and/or existing natural waterbodies are drained out or diverted or contaminated, and/or parennial crop species prohibitted by Forest Regulation are cultivated	NO	HB shall ensure leasehold forestry proposals are screened and approved in line with the existing leasehold forestry regulations prior to providing support.	Develop and put in to practice a simple leasefhold forestry proposal screening guidelines incorporating relevant clauses of Leasehold forestry regulations	Landscape coordinator in guidance o Thematic Coordinator, Timing - once and prior to providing support		Landscape coordinator; Timing: periodic field visits
	Revision and Amendment of CFOPs (Through Consultancy)	2	NDC	No negative environmental impacts likely if CFOP revision is done in line with forest regulations, 1995 including interlization of social, gender, economic and environmental aspects of community forestry.	NO	HB shall ensure the terms of reference for CFOP revision incorporates all necessary points likely to induce any potential negative impact	Make it mandatory in the ToR for the potential consultant/service provider to follow the CFOP manual and forest regulations, 1995 in the process of CFOP revision	Landscape coordinator in guidance o Thematic Coordinator; Timing: while developing ToR, and during support for the activity	Concerned field staff's periodic	Landscape coordinator; Timing: periodic field visits
1.4.2 (bullet 4) included	Piloting of Cardamom, Turmeric, Ginger, Broom grass cultivation in CFUG to poor (leasehold forestry concept)	2	NDC	Adverse impacts likely (as reported from India, Sri Lanka) on biodiversity, soil and water quality due to intensiev/indiscriminate use of fertilizers and pesticides (scidev.net/en/south- asla/news/cardamom-crop-affect-forest-studies- say,html); Pesticides used in commercial ginger farming is also known for contamination in rivers and water bodies (South India), Plant communities, avifaunal and herpetofauna diversity is negatively impacted due to mono-culture inside forest areas.	NO	HB shal ensure piloting of quick income generating crops cultivation follows organic farming, and inter and mix cropping models are studied for maximising production.	Prepare and implement a simple guidelines based on organic farming principles for piloting of cardamom, turmeric and ginger cultivation in forest areas	Landscape coordinator in guidance o Thematic Coordinator, Timling - once and prior to piloting	f Approved guidelines for piloting of cardomom, ginger and turmeric, field staff's peridic reports	Landscape coordinator; Timing: periodic field visits
1.4.2. (bullet 1)		2	NDC	Adverse impacts likely in case green enterprises ignore/overlook principles of environment friendly sustainable development.	NO	HB shall ensure green enterprise development activities to be supported is screened from likely environmental/social impacts perspectives as per existing relevant regulations	Prepare a simple guidelines for environmental/social sceening of proposed green enterprises activities and implement it	Landscape coordinator in guidance o Thematic Coordinator, Timing - guidelines - once, screening - prior to providing support to specific activities	Approved guidelines field staff's	Landscape coordinator; Timing: periodic field visits
2.4.3	Develop and implement a carbon f Develop second gold standard biogas in TAL	1, 2	NDC	No adverse impact likely, bears some risk of adverse social and gender impacts in case the poorest among the poor remain unincluded in the program	NO	HB shall ensure lessons learned from first gold standard project regarding reaching to the acute poor is effectively captured in second gold standard project				
	Validation for biogas PDD	2	NDC	No adverse impacts likely	NO					
1	Biodiversity Conservation									
1.1	Threats to Focal Sepcies Reduced									
1.1.1	Research and Monitoring Species Conservation and	1,2								
	Black buck /gharial/ vulture/ Ghoral/ Bijayasal	1,2	NDC	No likely adverse environmental impacts of Conserv	nO	HB shall ensure translocation and re- introduction of species is done in line with the IUCN/SSC Guidelines for species re- introductiions	Plan and implment translocation and re-introduction of species as per the IUCN general and species-specific re- introduction guidelines	of Thematic Coordinator; Timing -	Species re-introduction plan as per IUCN guidelines	Thematic Coordinator; Timing: as and when the species re- introduction is planned
	Management of new black buch population Important flora (Bijaya Sal/	2	NDC	No adverse impact likely	NO					
	Important flora (Bijaya Sal/ Chanp, Okhar, Kaulo) conservation	2	NDC	No adverse impacts likely	NO					
1.1.3	Build capacity to reduce threat to focal species	1,2								
	Capacity building/mobilization of CBAPOs	1,2	NDC	No adverse environmental impact likely as already tested model of CBAPO is planned for replication	NO					
1.1.4	Management of HWC	1,2								

IR/ Sub- IR	Activity	Year	CE/ NDC	Potential Environmental/Social Impacts	Significance? Yes/No	IEE Condition	Specific Mitigation Actions	Person responsible to implement mitigation actions; Timing	MoV of implementation of mitigation actions	Person resp. for monitoring the effectiveness of mitigation actions; Timing
	HWC mitigation (through power fencing)		NDC	Likely impacts expected are obstruction in traditional migratory routes of wildlife including Elephants and constrained access of Forest-dependents to basic forest products; Field visit in TAL revealed that power fencing along forest fringes were not obstructive for the movement of Wildlife in their traditional migratory routes. They are strategically aligned along the margine between cultivated lands, human settlements and contiguous blocks of forest contributing significantly in HWC: In CHAL however, local communities in most places reported that monkeys, beer, leopard and porcupine are causing HWC that urgently requires innovative approaches to save agricultural crops, livestocks and human lives;	NO		1) Undertake study on a) HWC impact in selected wildlife hotspot areas of CHAL and TAL and b) socio economic impact of power fencing in TAL: 2) Undertake feasibility assessment of institutionalizing effective HWC mitigation measures in areas with severe adverse impacts and institutionalize accordingly	Thematic Coordinator jointly with Landscape coordinators; Timing: as per annual planning	Study/assessment reports, operationalized HWC mitigation mehansims	Thematic Coordinator, Timing: periodic field visits
1.1.5	Transboundary cooperation Threats to targeted landscape									
1.2.1	reduced Under take habitat restoration	1,2								
1.2.1	and management Habitat (grassland)	1,2								
	management	2	NDC	No adverse impacts likely	No					
	corridors and bottlenecks	1,2		No adverse impact likely	No		Undartako participaton:	Landsonn codit '-'-'		
	Livestock grazing pressure management	2	NDC	No adverse environmental impacts, some social adv	No	HB shall ensure practical options for livestock grazing pressure management are explored, agreed and implemented in a participatory manner.	Undertake participatory assessment of site specific constraints of grazing pressure management and implement the best possible options in agreement with concerned communities	Landscape coordinator jointly with consortium partner coordinators; Timing: field staff's periodic reports	Assessment reports, Agreed options implementation arrangements	Landscape coordinator; Timing: periodic field visits
	Water supply management for wildlife	2	NDC	No adverse impact likely as long as the natural water courses are not diverted, water bodies not drained out or disturbed: Increase of wildlife population due to increased availability of water is nor likely as the forest corrdor is surrounded by human settlements and forests face grazing pressure.	No	HB Program shall maintain natural water co	ourses while managing water supply			
1.2.2	Wetland Management and Invasive Species Control	1,2								
	Mechanism for biological control		NDC	Adverse environmental impact of bilogical control a	Yes	HB shall ensure that biological control agent selected to be released is neutral to plants, living organisms and human beings prior to its release	Field test the performance of the biological control agent found most suitable under lab conditions prior to its release	Thematic Coordinator jointly with Landscape coordinators	Field test performance reports	Thematic Coordinator; Timing: during periodic field visits
	Community engagement to manage IAPS in forest ecosystems		NDC	No adverse impact likely as mechanical control method is used	NO					
	 Community engagement to manage IAPS in one critical wetland 		NDC	No adverse environmental impact likely in case of mechanical control method	NO					
	Wetland restoration and management	1,2	NDC	Adverse environmental impacts e.g., habitat distruction, biodiversity loss likely due to intensive and mechanized restoration work; risk of shortage or too much of water downstream;	NO	HB shall ensure restoration of wetlands is undertaken based on Principles and Guidelines for Wetlands Restoration issued by Ramsar Convention	1. Plan the wetland resotoration as guided by the Principles and Guidelines for Wetlands Restoration adopted by resolution VIII.16 (2002) of the Ramsar Convention; 2. Implement the restoration work accordingly.	Landscape coordinators in consultation with Thematic coordinator; Timing; in planning and implementation stage as per annual planning	Wetland restoration plans, progress reports	Thematic Coordinator; Timing: during periodic field visits
1.2.3	Critical sub-watershed management									
	Support to communities (including women) to implement sub-watershed management plan	of livelihou	NDC	No adverse impacts likely in general however, some specific management activities might require environmental screening	NO	HB shall ensure support for sub-watershed management activities is provided based on environmental screening of proposed activities	Develop simple sub-watershed management activities screening guidelines; 2. Undertake environmental screening before approving the support to proposed activities	Thematic Coordinator for 1), Landscape coordinator and consortium partner coordinators for 2)	Sub-watershed activitie screening guidelines	Thematic Coordinator; Timing: periodic field visits
1.4.2	Support community groups for	1,2	000 101 101	est dependent communities more ascu						
	livelihood improvement included with green enterprise									
	Promotion of community managed tourism	1,2	NDC	Adverse impacts likely e.g., increased pressure on forest for fuel and fodder, unsustainable demand of water, cultural problems and pollution of water sources.	NO	HB shall ensure eco-friendly and resource efficient approaches are practiced, incoming tourists are sensitized about local culture	Develop and disseminate a user's guidebook for planning and operationalization of community-based tourism for use of communities: 2) Screen the incoming proposals for support as per the guide book prior to promoting	Thematic Coordinator for 1) and Landscape coordinator and consortium partner coordinators for 2): Timing: once for 1), as per annual plan for 2)	User's guidebook for community based torism promotion	Thematic Coordinator; Timing: periodic field visits
	Micro-credit and IGA	1,2	NDC	Adverse impacts likely from forest-based IGAs with increased pressure on forest for raw material	NO	HB shall ensure proposals on forest-based IGAs confirm sustainable supply of raw materials and extra pressure on forests is not likely	Develop a forest-based IGA proposal screening checklist for use of field offices, 2) Screen the IGA proposals before providing support	Thematic Coordinator for 1) and Landscape coordinator and consortium partner coordinators for 2): Timing: once for 1), as per annual plan for 2)	IGAs Screening Checklist, field staff's periodic reports	Thematic Coordinator; Timing: periodic field visits
	Cultivation of broom grass and cardamom (Included in 2.3.2 last bullet)		NDC	No adverse impacts likely due to broom grass cultivation (refer to 2.3.2 last bullet for cardamom)	NO NO	HB shall ensure Support proposals for	Develop a Swertia cultivatiion	Thematic Coordinator for 1) and Landscape coordinator and	Swertia Cultivation Screening Checklist	
	 Swertia cultivation and marketing 			No adverse impact likely to the extent that natural plant communities on the forest floor are retained		His shall ensure support proposals for swertia cultivation are not based on heavy clearance of forest floors	proposal screening cheklist; 2)Screen the proposals prior to supporting			Thematic Coordinator; Timing: periodic field visits

IR/ Sub-	Activity	Year	CE/ NDC	Potential Environmental/Social Impacts	Significance? Yes/No	IEE Condition	Specific Mitigation Actions	actions; Timing	MoV of implementation of mitigation actions	Person resp. for monitoring the effectiveness of mitigation actions; Timing		
	Agro-based enterprise		NDC	No adverse impacts likely directly yet might require environmental screening for potential indirect adverse impacts		HB shall ensure all agro-based enterprise proposals are supported after environmental screening	Develop an agro-enterprises	Thematic Coordinator for checklist, Landscape coordinator jointly with consortium partner staff for screening	Agro-enterprises screening checklist, Screening records	Landscape coordinator; Timing: periodic field visits		
	Bamboo plantation and handicraft				NDC	No adverse impact likely however bears the risk of increased pressure on natural forests for supply of bamboo		HB Shall ensure proposals supported for bamboo based handicrafts are based on sustainable supply of bamboo	screen the bamboo-based handicraft proposals to ensure they have a sustainable source of bamboo supply	are received	Bamboo-based Handicraft proposal screening checklist	Thematic Coordinator; Timing: periodic field visits
 Conservation plantaton and handicraft 				No adverse impact likely provided no extra pressure on natural forests for raw materials is assured		HB shall ensure proposals supported are based on sustainable supply of raw materials	material required for handicraft	Landscape coordinator and concerned consortium partner staff; Timing as and when the activity is planned	Assessment ensuring sustainable supply of raw meaterials	Landscape coordinator; Timing: before approval for support		

Annex-8: Hariyo Ban Program Staff List

Sn	Name	Position	Duty Station	Se	ЭХ			Caste/	Ethnicity	
311	Name	POSITION	Duty Station	М	F	BCT	IJ	Dalit	Madhesi	Others
WWF	Nepal									
1	Anil Kumar Rai	M&E Assistant	Chitwan	1			1			
2	Anita Adhikari	M&E Assistant	Kathmandu		1	1				
3	Anjana Shrestha	Program Associate	Kathmandu		1		1			
4	Anuja Shrestha	Program Associate	Pokhara		1		1			
5	Bhaskar Deo Chaudhary	Field program associate	Dhangadhi	1			1			
6	Dipesh Joshi	Program Officer, Grants & Internships,	Kathmandu	1		1				
7	Gita Bham	Grants & Compliance Associate	Kathmandu		1	1				
8	Haisuba Gurung	Messenger	Pokhara		1		1			
9	Jagadish Kuikel	Livelihood specialist	Kathmandu	1		1				
10	Jayendra Raj Koirala	Program Administrator	Kathmandu	1		1				
11	Judy Oglethorpe	Chief of Party	Kathmandu		1					1
12	Keshav Prasad Khanal	Coordinator- Sustainable Landscapes	Kathmandu	1		1				
13	Lila Jung Gurung	Program Associate	Pokhara	1			1			
14	Mahendra Shakya	Program Associate	Kathmandu	1			1			
15	Mamta Shrestha	Finance & Compliance Associate	Dhangadhi		1		1			
16	Manoj Chaudhary	M&E Assistant	Dhangadhi	1			1			
17	Pallavi Dhakal	Communications Officer	Kathmandu		1	1				
18	Prabin Rayamajhi	Office Messenger	Kathmandu	1		1				
19	Prabita Shrestha	Grants & Compliance Officer	Kathmandu		1		1			
20	Purna Bahadur Kunwar	Coordinator	Pokhara	1		1				
21	Rajan Rijal	Finance & Compliance Associate	Chitwan	1		1				
22	Rajendra Lamichhane	Monitoring & Evaluation Specialist	Kathmandu	1		1				
23	Rajeshree Bista	F&A Officer	Pokhara		1	1				
24	Raju Kumar Khadka	Driver	Kathmandu	1		1				
25	Ram Bahadur Praja	Messenger	Kathmandu	1			1			
26	Richa Bhattarai	Communications Associate	Kathmandu		1	1				
27	Salina Shrestha	Administration Assistant	Kathmandu		1		1			
28	Sangita Ramjali	Driver	Pokhara		1		1			
29	Sanjay Pariyar	M&E Assistant	Pokhara	1				1		

Cn	Name	Position	Duty Station	Se	ЭХ			Caste/	Ethnicity	
Sn	ivarne	POSITION	Duty Station	М	F	BCT	IJ	Dalit	Madhesi	Others
30	Shant Raj Jnawali	Coordinator- Biodiversity Conservation	Kathmandu	1		1				
31	Shova Shilpakar	Finance Manager	Kathmandu		1		1			
32	Shruti Dhungel	Finance and Compliance Associate, CHAL	Pokhara		1	1				
33	Shrutina Dhanchha	M&E Assistant	Kathmandu		1		1			
34	Srijana Baral	Program Officer	Pokhara		1	1				
35	Surendra Ranpal	Program Associate- TAL	Chitwan	1				1		
CARE	Vepal									
36	Ajaya Lama	Driver	Pokhara	1			1			
37	Arun Adhikari	Field Coordinator	Nepalganj	1		1				
38	Bhawana KC	Field Officer	Lamjung		1	1				
39	Bir Bahadur Thapa	Driver	Nepalganj	1		1				
40	Bishnu Pd. Acharya	Field Coordinator	Gorkha	1		1				
41	Deependra Raj Joshi	Finance Officer	Pokhara	1			1			
42	Dev Narayan Mandal	Field Officer	Gorkha	1					1	
43	Dev Raj Gautam	Team Leader	Pokhara	1		1				
44	Dewata Rijal	Field Officer	Chitwan		1	1				
45	Dr. Sunil Kumar Regmi	Climate Change Adaptation Coordinator	Kathmandu	1		1				
46	Ingej Manadhar	Field Officer	Banke	1			1			
47	Jagadish Bhatta	Field Coordinator	Dhangadhi	1		1				
48	Khim Giri	Admin Assistant	Pokhara	1			1			
49	Kuldip Paudel	Climate Change Adaptation (CCA) Specialist	Nepalganj	1		1				
50	Laxmi Malla	Admin Assistant	Nepalganj		1	1				
51	Madhav Dhakal	Governance Specialist	Nepalganj	1		1				
52	Maiya Chaudhary	House Keeper	Nepalganj		1		1			
53	Man Bdr Biswakarma	Climate Change Adaptation Specialist	Nepalganj	1				1		
54	Maya Nath Ghimire	Field Coordinator	Bharatpur	1		1				
55	Nabin Dhungana	Field Officer	Chitwan	1		1				
56	Pavitra Jha	REDD Specialist	Pokhara		1				1	
57	Pratigya Silawal	Field Coordinator	Pokhara		1	1				
58	Pratima Shrestha	Climate Change Adaptation Specialist	Pokhara		1		1			
59	Ram Bdr Mijar	Field Officer	Kanchanpur	1				1		
60	Samjhana Wagle	Field Officer	Syangja		1	1				

Sn	Name	Position	Duty Station	Se	ЭХ	Caste/Ethnicity				
311			Duty Station	М	F	BCT	IJ	Dalit	Madhesi	Others
61	Sammar Bdr Rana Magar	House Keeper	Pokhara	1			1			
62	Sandeep Sharma	Field Officer	Gorkha	1		1				
63	Sandesh S. Hamal	Deputy Chief of Party	Kathmandu	1		1				
64	Shekhar Bdr Adhikari	Field Officer	Tanahun	1		1				
65	Shikha Shrestha	GSI Coordinator	Kathmandu		1		1			
66	Shweta Dhoubhadel	Program Officer (M&E)	Pokhara		1		1			
67	Sukbir Thami	Field Officer	Kaski	1			1			
68	Thir Bahadur Thapa	Field Officer	Bardia/Kailali	1		1				
69	Topendra Basnyat	Finance Officer	Nepalganj	1		1				
FECOF	FECOFUN									
70	Binod Gayek	District Coordinator	Kaski	1				1		
71	Birjung Oli	District Coordinator	Dang	1		1				
72	Deepak Adhikari	District Coordinator	Nawalparasi	1		1				
73	Deepak Bahadur Chand	Regional Coordinator	Nepalgunj	1		1				
74	Dhan Bahadur Khadka	District Coordinator	Gorkha	1		1				
75	Dig Bijaya Dhakal	Finance and Admin Officer	Kathmandu	1		1				
76	Dil Raj Khanal	National Policy Advocacy Officer	Kathmandu	1		1				
77	Dinesh Karki	Security Guard	Kathmandu	1		1				
78	Ganga Maya Neupane	Regional Coordinator	Pokhara		1	1				
79	Gita Neupane	Program Assistant	Rautahat		1	1				
80	Kalika KC	Program Assistant	Parbat		1	1				
81	Kisor Rimal	Monitoring and Documentation Officer	Chitwan	1		1				
82	Kopila Tumsing	Program Assistant	Makwanpur		1		1			
83	Krishna Bahadur Khadka	Team Leader	Kathmandu	1		1				
84	Laxmi Prasad Bhatta	District Coordinator	Kanchanpur	1		1				
85	Maheshwor Basnet	District Coordinator	Chitwan	1		1				
86	Narbada Roka	Program Assistant	Syanja		1	1				
87	Nirmala Sharma	Monitoring and Documentation Officer	Kathmandu		1	1				
88	Pabitra Marasini	Program Assistant	Gulmi		1	1				
89	Parbati Tiwari	Program Assistant	Parsa		1	1				
90	Pemamaya Lama	Program Assistant	Bara		1		1			
91	Poonam Bhatta Pantha	Gender and Social Inclusion Officer	Kathmandu		1	1				

Sn	Name	Position	Duty Station	Sex		Caste/Ethnicity					
				М	F	BCT	IJ	Dalit	Madhesi	Others	
92	Pradeep Budhathoky	Climate Change and REDD Officer	Kathmandu	1		1					
93	Radhika Thapa	Program Assistant	Palpa		1	1					
94	Rajeeb Chaudhary	District Coordinator	Kailali	1			1				
95	Raju Bhattarai	District Coordinator	Tanahun	1		1					
96	Raju Khadka	Driver	Kathmandu	1		1					
97	Santosh Chaudhary	District Coordinator	Banke	1			1				
98	Sanu Thapa Magar	District Coordinator	Lamjung		1		1				
99	Srijana Sharma	Account Officer	Kathmandu		1	1					
100	Susma Silwal	Program Assistant	Dhading		1	1					
101	Tulashi Prasad Adhikari	Documentation and Communication Officer	Kathmandu	1		1					
NTNC											
102	Abhinay Kushwaha	Operation Officer	Kathmandu	1					1		
103	Amar Sing Thakur	Junior wildlife technician	Kanchanpur	1					1		
104	Bishnu Singh Thakuri	Consrvation Officer-Program	MCAP-Gorkha	1		1					
105	Dip Prasad Chaudhary	Junior wildlife technician	ACAP	1			1				
106	Ganesh Rana	Junior wildlife technician	Kanchanpur	1			1				
107	Khusi Ram Chaudhary	Junior wildlife technician	Bardiya	1			1				
108	Kiran Lama	Junior wildlife technician	MCAP - Philim	1			1				
109	Om Prakash Chaudhary	Junior wildlife technician	ACAP	1			1				
110	Purna Lama	Junior wildlife technician	Parsa	1			1				
111	Ram Raj Chaudhary	Junior wildlife technician	Bardiya	1			1				
112	Ramesh Darai	Junior wildlife technician	Parsa	1			1				
113	Sikhya Adhikari	GESI Officer	Kathmandu		1	1					
114	Shyam Kumar Thapa	Monitoring and evaluation officer	Kathmandu	1		1					
115	Tika Ram Tharu	Junior wildlife technician	Chitwan	1			1				
116	Tirtha Lama	Junior wildlife technician	Chitwan	1			1				
117	Tirtha Raj Chaudhary	Junior wildlife technician	MCAP - Philim	1			1				
Total Hariyo Ban Staff		117		75	42	66	41	5	4	1	

Implementing the Adaptation Plan

Implementation of the adaptation plan bridges the gap between the vulnerability assessment and adaptation itself. Community ownership of implementation processes is ensured by participatory planning processes with the involvement of all major stakeholders and local leaders.

Integrating Adaptation into Local Development Plans

In order to effectively address the longer term impact of climate change, community and local level adaptation plans must be integrated into local, sectoral, and national deSvelopment planning. As stated in the Local Adaptation Plan of Action framework, local bodies are the best entry point for this and will be requested to ratify the incorporation of

adaptation initiatives into local-level development planning, including adaptation options to address the vulnerability of ecosystem at the landscape level.

Mainstreaming Climate Change

All development projects are influenced by climate change. The Hariyo Ban Program encourages actors in Nepal's development sector to assess likely climate impacts and review program opportunities and challenges provided by climate change, to ensure that conservation and development move forward in a balanced manner. Hariyo Ban works with sectoral line agencies at the district level to bring climate change issues into mainstream sectoral planning processes.

Step	Purpose	Tools used					
Assess vulnerability and resilience at the landscape/ river basin level	To determine vulnerabilities of critical human and natural systems at the larger landscape level; develop and prioritize adaptation interventions and strategies.	Updated Flowing Forward methodology (background studies, participatory stakeholder workshop, and expert opinions, etc.)					
Assess the underlying causes of poverty and vulnerability at the Village Development Comittee level	To identify vulnerable wards, communities and ecosystems.	Power and resource mapping; class, caste and dependency analyses; gender, mobility, timeline, and wage analyses, threat analysis.					
Climate change sensitization	To raise awareness about the impacts of climate change.	Hazard analysis / trend mapping; climate scenario visioning exercises; climate change awareness campaigns.					
Climate vulnerability and capacity assessment	To identify climate vulnerable communities, households and individuals in wards and villages, and ecosystem vulnerability.	Hazard mapping; vulnerability mapping; resource mapping; hazard and risk impact analyses; differential vulnerability matrix; participatory well-being ranking; ecosystem vulnerability analysis; climate information analysis and scenario planning; community visioning exercise; service provider analysis.					
, ,	To identify adaptation practices and actions that will reduce vulnerability to current and future climate change.	Coping and adaptation options analysis; prioritization of adaptation options.					
	To support resource exploration and the efficient mobilization of resources.	Adaptation partnership mapping.					
Formulation of adaptation plan	To prepare an adaptation plan.	Policy analysis; analysis of service providers; best practice sharing.					
Formulation of participatory monitoring, evaluation, reflection and learning plan	To prepare a monitoring plan whilst keeping in mind the following questions: Are achievements matching expectations? Are they the right achievements? Are we using the right methods? Are we operating on a large enough scale?	Needs mapping; service provider analysis; adaptation visioning exercises; rainfall trend analysis; reflection sessions; behavior change journals; hazard response force field analysis.					

The Hariyo Ban Program is named after the famous Nepali saying 'Hariyo Ban Nepal ko Dhan' (Healthy green forests are the wealth of Nepal). It is a USAID funded initiative that aims to reduce the adverse impacts of climate change and threats to biodiversity in Nepal. This will be accomplished by working with the government, communities, civil society and private sector. In particular, the Hariyo Ban Program works to empower Nepal's local communities in safeguarding the country's living heritage and adapting to climate change through sound conservation and livelihood approaches. Thus the Program emphasizes the links between people and forests and is designed to benefit nature and people in Nepal. At the heart of Hariyo Ban lie three interwoven components – biodiversity conservation, payments for ecosystem services including REDD+ and climate change adaptation. These are supported by livelihoods, governance, and gender and social inclusion as cross-cutting themes. A consortium of four non-governmental organizations is implementing the Hariyo Ban Program with WWF Nepal leading the consortium alongside CARE Nepal, FECOFUN and NTNC.











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ent (USAID).



Background

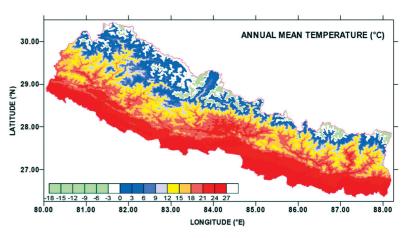
The Hariyo Ban Program climate adaptation component is designed to build on the experiences of the SAGUN¹ and SCAPES² programs managed by CARE and WWF; it also incorporates learning from other climate change adaptation initiatives around the globe. Hariyo Ban provides an excellent opportunity to better understand the nature of the climate change adaptation practices in poor communities. It also provides an opportunity to develop processes for community-led climate change adaptation that are rooted in locally appropriate institutions and linked to ecosystem services. In addition, the program will help to identify equitable and cost effective adaptation initiatives that will work in Nepal. In line with provisions made in the Government of Nepal's Local Adaptation Plan of Action, the Hariyo Ban Program has piloted a number of tools which support the integration of sound ecosystem management and community adaptation to build climate change resilience of both people and natural systems.

This briefing paper focuses on the impact of climate change on Nepal's poor; the impact of climate change on Nepal's ecosystems; the integrated adaptation approach used by Hariyo Ban Program; and the adaptation strategies identified by the program that will increase community and ecosystem resilience.

Climate Change Today

Climate change³ is not just a distant threat but a clear and present danger – its economic impacts are already being felt. It is different from climate variability, which refers to short-term variations on the mean. Climate change affects many aspects of the climate, making rainfall less predictable, altering seasonal weather patterns, and increasing the likelihood of extreme weather events like high intensity storms, droughts, and hot or cold waves; and sudden glacial lake outbursts.

Temperature: Seasonal temperatures in Nepal are already increasing at a faster rate than the global average, and this trend is likely to continue. The mean annual temperature is projected to increase by an average of 1.2° C by 2030, 1.7° C by 2050 and 3° C by 2100 when compared to 2000 pre-baseline figure⁴. There is, however, also substantial seasonal and spatial variation in the projected temperature rise: winter temperatures show more of an increase than summer, with higher increases at higher altitudes.



Source: Department of Hydrology and Meteorology, Nepal

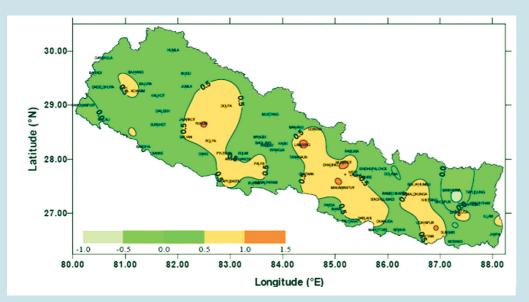
 $^{^{1}\} Strengthened\ Actions\ for\ Governance\ in\ Utilization\ of\ Natural\ Resources\ (SAGUN)\ Program\ (2002-2006)$

Sustainable Conservation Approaches in Priority Ecosystems (SCAPES) program (2010-2014)

³ Climate change refers to any change in climate over time, whether due to natural variability or anthropogenic forces.

⁴ Ministry of Environment (2010). National Adaptation Plan to Climate Change, Kathmandu, Nepal. The projection was based on General Circulation. Model run with SRES B2 Scenario.

Precipitation: Eighty percent of Nepal's annual precipitation falls during the monsoon season, which is expected to increase by 15 to 20 %, while winter rainfall is expected to decrease. Climate change is also likely to exacerbate the contrast between wet and dry seasons, a process that will culminate in rainy season downpours that are more extreme in both intensity and duration. In addition, higher temperatures, increased rates of evapotranspiration and decreased winter precipitation may increase instances of drought. Precipitation extremes are likely to be Nepal's most difficult and pressing climate change adaptation challenges.



Source: Department of Hydrology and Meteorology, Nepal

Climate Change Impacts

The impacts of climate change in Nepal are exacerbated by a combination of factors. These include the over-exploitation of natural resources, resulting in deforestation and forest degradation; the use of unsustainable farming practices; the haphazard construction of major infrastructure; rapid urbanization; poverty; air pollution; and growing energy demand. Nepal's low human development index rating and complex topography add to its vulnerability to climate change. Ongoing and projected changes in the climate are likely to have a range of impacts that will affect different sectors of the economy. Forestry and biodiversity are likely to be affected, as are agriculture, food security, water and energy, health, and urban/non-urban infrastructure. These changes will also increase the likelihood of climate induced disasters and will affect gender, caste, and ethnic groups in different ways.

Forestry and biodiversity: Forests, rangelands, wetlands, mountains and agro-ecosystems are affected by climate change in many different ways. The number of forest fires is likely to increase, as are incidences of forest die-back. The number of pests and pathogens, invasive species, and landslides are also likely to rise. Changes in climate will affect tree physiology, plant and animal phenology (timing of life cycle), forest growth, and biodiversity levels; these impacts will have knock-on effects on forest-dependent communities and society as a whole. Although the severity of these impacts will vary over different landscapes and ecosystems, change in period distribution and loss of species biodiversity can already be seen. In addition, ecosystem services (e.g. stabilization of slopes, provision of water supplies and other resources) are also affected in several areas of Nepal's forests.

Agriculture and food security: Higher temperatures and temperature variability have caused a shift in Nepal's agro-ecological zones and are leading to prolonged dry periods due to changes in rainfall patterns and exacerbated by high temperatures. High temperature and high intensity rainfall (a congenial environment for microorganisms) has also increased incidences of crop pests and livestock disease, resulting in productivity declines. Water scarcity, more erratic and intense rains, and flooding are taking a toll on the country's subsistence farming-based economy. Landslides and flash floods have already reduced the amount of land available for crops—a trend which is likely to continue into the future. Lowered levels of agricultural productivity pose a threat to food security in the country. Despite this gloomy prognosis, higher

temperatures will also create agricultural opportunities: fruit crops that thrive in a temperate climate such as apples can be grown at higher altitudes. With a moderate increase in temperature and precipitation, rice production could also increase across the country, as could wheat production in some western areas⁵.

Water resources and energy: Climate change impacts will also be seen in the water resource and energy sectors. The availability of water resources in terms of quantity (too much or too little), quality, and timing (seasonality) is likely to change significantly. This will affect agriculture, the energy sector, water supplies, and human health. It will also increase the likelihood of water-related disasters. Changes in river flow will have a direct impact on Nepal's hydropower projects, while increased incidences of forest fire pose a threat to the already diminishing fuel wood supply. On the positive side, biogas may operate at higher altitudes.

Human health: Climate change is also putting pressure on Nepal's over stretched health services by increasing the spread of infectious diseases. This is evident in the increase in the range, frequency, and severity of malaria, kala-azar, (black fever) and Japanese encephalitis cases (NAPA, 2010). In addition, climate change will decrease the potency and availability of medicinal plants, due to change in chemical composition⁶ and reduce the nutritional value of crops and pasture. Migration of communities due to extreme weather conditions has already started, and incidences of this are only likely to increase in the future.

Climate induced disaster: Nepal is extremely vulnerable to a range of hydro-meteorological hazards including floods, landslides, droughts, glacial lake outburst floods, debris flows, and events including extreme rainfall, and extreme hot or cold weather. Every year more than 1 million people are at risk from climate induced disasters in Nepal (NAPA, 2010).

Social impacts: Nepal's climate vulnerability is aggravated by its prevailing socio-cultural and institutional set-up. Although climate change will have differing impacts on specific groups of people, women, children and marginalized communities tend to have the lowest adaptive capacity. Any decline in the availability of water or firewood, or adverse changes in agricultural practices have a direct impact on the lives of women and other vulnerable groups.

Hariyo Ban Program Climate Change Adaptation Approach

Reducing the Threat of Climate Change by Promoting Adaptation

Maplecroft (2011)⁷ places Nepal as fourth highest on its Climate Change Vulnerability Index. This vulnerability has led to greater hardships for many of Nepal's rural communities. On the current climate change trajectory, it is inevitable that climate change will continue to advance and have worsening impacts on Nepal's communities. It is therefore vital that urgent efforts be made to support communities and ecosystems to adapt to climate change. Time is running out. If we don't act now, future costs will be higher and impacts greater.

Adaptation initiatives require a context-specific analysis of vulnerability to climate change so that strategies can be developed that target the particular needs and priorities of stakeholders, particularly those from vulnerable groups. In line with its National Adaptation Program of Action (NAPA) on Climate Change, Nepal has adopted such an approach which incorporates meaningful inputs from a wide range of stakeholders, including those living in vulnerable communities and ecosystems. Despite this innovative approach to climate-vulnerability analysis and programming, significant capacity barriers have prevented initiatives from moving forward. As adaptation plans should be context and location specific, community level plans should first be formulated and then fed into the Local Adaptation Plan of Action framework, which allows for the identification of vulnerable wards, communities and households. As local programs are prepared by Village Development Committees or municipalities, the challenge here is to find ways to incorporate community level needs and adaptation options into village and municipal level plans. With this in mind, the Hariyo Ban Program is supporting vulnerable communities in the preparation, implementation and

monitoring of Community Adaptation Plans of Action. It is also assisting with the integration of community level plans and adaptation options into village or municipal level programs. This approach helps to ensure that the needs of women, the poor, and other socially excluded groups are better addressed, community ownership is enhanced, and implementation is fast, efficient and transparent. The process also helps communities to better articulate the climate related challenges they are facing, and to identify and prioritize community-based adaptation strategies.

The Hariyo Ban Program integrates two approaches to adaptation that are often thought of as quite separate, or even in opposition to each other: the Community Based Approach and the Ecosystem Based Approach. This integrated approach acknowledges both human rights and ecosystem principles⁸. It uses ecosystems to help vulnerable people increase resilience and adapt to climate change. At the same time, it recognizes that many ecosystems and the services they provide are themselves vulnerable to climate change, and identifies ways to build their resilience and avoid maladaptation⁹. In the Hariyo Ban Program, landscape, or river basin level vulnerability assessments are conducted using WWF's Flowing Forward approach¹⁰ which determines larger human and natural system vulnerabilities within the landscape. This information is used to inform community level vulnerability assessment and adaptation planning and integration into local development plans.

The Hariyo Ban Program makes the National Framework for Local Adaption Plans for Action¹¹ operational by supporting the development of community level adaptation plans and feeding them into the local level plans prepared by Village Development Committees and municipalities.

Preparing Local and Community Level Adaptation Plans

The Hariyo Ban Program aims to build the capacity of community groups (especially Community Forest User Groups) to take the lead in community adaptation planning. The adaptation plan preparation processes has the following stages: i) identification of vulnerable wards, vulnerable communities, and degraded areas; ii) sensitization of communities to the impacts of climate change; iii) assessment of climate vulnerability; iv) formulation of an adaptation plan; and v) preparation of a framework for participatory monitoring, evaluation, reflection and learning¹². The vulnerability assessment and adaption planning processes are presented in more detail in Table 1.



⁵ G. Malla (2008). Climate change and its impact on agriculture. The Nepalese Journal of agriculture and environment, Vol 9, June 2008.

⁶ Cavaliere, C. (2009). The effects of climate change on medicinal and aromatic plants, HerbalGram. 81:44-57. http://cms.herbalgram.org/herbalgram/issue81/article3379.html?Issue=81

http://maplecroft.com/about/news/ccvi_2013.html

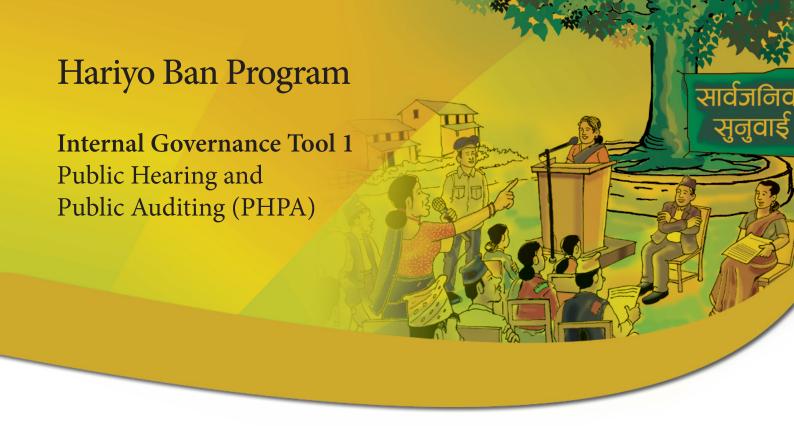
 $^{^{8}\,}$ Girot Pascal et al. (2012). Integrating community and ecosystem based approaches in Climate Change, ELAN Network.

⁹ An adaptation action that may give short term benefits, but ultimately leads to increased vulnerability to climate.

¹⁰ Updated guidance manual on the Flowing Forward approach currently in preparation by WWF.

¹¹ GON (2011). National Framework on Local Adaptation Plan of Action. Government of Nepal, Ministry of Environment, Singha Durbar.

¹² CARE (2012). Participatory Monitoring, Evaluation, Reflection, Learning for Community Based Adaptation: A Manual for local practitioners.



Strengthening the internal governance of natural resource management groups is a cross-cutting theme across the Hariyo Ban Program components. It is very important since many rural people in Nepal are highly dependent on forests for their livelihoods and wellbeing. This includes forest resources such as firewood, clean water, building materials, fodder for livestock, and medicinal plants, as well as ecosystem services such as protection from landslides and floods. Many rural poor may hence exert the highest pressures on forests because they have no alternatives. Yet they often have little say in how forests are managed and how the benefits from sustainable forest management are distributed.

Internal governance strengthening builds the capacity of Natural Resource Management (NRM) groups, community organizations, including those in leadership positions, and increase levels of meaningful participation by women and other marginalized groups. This in turn promotes the equitable sharing of resources and other benefits. Internal governance strengthening is achieved through the use of a number of different tools specified in the Community Forestry Development Guidelines of 2009. Hariyo Ban Program uses three such tools as identified in Community Forestry Development Guidelines of 2009. They are:

Tool 1: Public Hearing and Public Auditing (PHPA)
Tool 2: Participatory Well-Being Ranking (PWBR)
Tool 3: Participatory Governance Assessment (PGA)

Public Hearing and Public Auditing (PHPA) is – a mandatory provision for all Community Forest User Groups – about which the Guidelines state: 'A public hearing and public auditing should be conducted at least once a year to inform users about group programs, income, expenditure, sale and distribution of forest products , group decisions and their implementation status' (Chapter V, article 5.2, page 17 and 18). In view of this, and based on learning and best practice from the SAGUN program¹, the Hariyo Ban Program has committed to using the Public Hearing and Public Auditing (PHPA) tool.

What is Public Hearing and Public Auditing (PHPA)?

Public Hearing and Public Auditing (PHPA) is a participatory process that aims to strengthen the transparency and accountability of institutions. The process is carried out by Forest User Groups with the assistance of local resource persons acting as facilitators. Through information sharing and question-answer style discussion, it allows for a mutual assessment of performance by user group members (the rights holders) and user group executive committee members (the duty bearers). While management processes and outcomes are assessed during the public hearing, the public audit reviews financial transactions, including the status of the group fund. Both processes are generally conducted annually. Process participants agree on a set of recommendations which are reviewed in the following public hearing and auditing.

Why Conduct a Public Hearing and Public Auditing?

Public Hearing and Public Auditing processes are based on the assumption that development initiatives can only be termed sustainable and equitable if both the duty bearers and rights holders internalize and practice the principles of good governance. The Public Hearing and Public Auditing process aims to establish and facilitate equitable participation, transparency and accountability by encouraging regular and open interaction between user groups and duty bearers. Moreover, it provides an opportunity for users from marginalized communities to actively engage in decision making processes. The overall objective

¹ Strengthened Actions or Governance in Utilization of Natural Resources (SAGUN) Program (2002-2006)

of Public Hearing and Public Auditing is to empower community members by exposing them to the principles of good governance, and engaging them in good governance practice. The participatory decision making processes that stem from this practice support the effective management of natural resources and increase levels of community and ecosystem resilience.

The Public Hearing and Public Auditing Process

The process has three main phases:

i) Preparatory Phase

Program staff and facilitators deliver orientation sessions to executive committee and user group members on the purpose and process of Public Hearing and Public Auditing. In addition executive committee members are advised to assemble documentation to smooth the process. Documentation includes the constitution of the Forest Users Group, the Forest Operational Plan, the minutes of previous meetings and general assemblies, inventory records, and previous audit reports. A date, time and venue are agreed on, and written invitations are sent out. Particular effort is made to ensure that at least 75% of the total number of general users participates in the process. Focus is given to the participation of women, the poor, and marginalized caste and ethnic groups. Other stakeholders are also invited to attend as observers.

ii) Public Hearing and Public Auditing Phase

Executive Committee and User Group members sit face-to-face. The facilitator(s) and invited observers sit to the left and right so that a circle or 'U' shape is formed. The facilitator leads the discussion which should promote as much interaction as possible. Another participant is assigned the task of minute taking. The process tends to be divided into two parts – first the public hearing and then the public audit. The sequence may change, however, depending on the preferences of the group. While the public hearing assesses the implementation status of a group's plans, processes and decisions, the public audit looks at the transparency and appropriateness of its financial transactions. The facilitator should actively encourage the participation of women, the poor, and marginalized caste and ethnic groups, and decisions should demonstrate respect for their inputs and aspirations.

iii) Follow Up

User group and executive committee members along with other stakeholders should be reminded that they must provide regular follow-up on decisions made during the hearing and audit processes. In addition, monitoring activities should be recorded and then presented during the next Public Hearing and Public Auditing process. Hariyo Ban Program will further refine this tool based on the learning from its application, particularly considering the interrelation and interdependency between different types of NRM groups functioning in a landscape.



The Hariyo Ban Program is named after the famous Nepali saying 'Hariyo Ban Nepal ko Dhan' (Healthy green forests are the wealth of Nepal). It is a five-year initiative that aims to reduce the adverse impacts of climate change and threats to biodiversity in Nepal. This will be accomplished by working with the government, communities, civil society and private sector. In particular, the Hariyo Ban Program works to empower Nepal's local communities in safeguarding the country's living heritage and adapting to climate change through sound conservation and livelihood approaches. Thus the Program emphasizes the links between people and forests and is designed to benefit nature and people in Nepal. At the heart of Hariyo Ban lie three interwoven components – biodiversity conservation, payments for ecosystem services including REDD+ and climate change adaptation. These are supported by livelihoods, governance, and gender and social inclusion as cross-cutting themes.











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Strengthening the internal governance of natural resource management groups is a cross-cutting theme across the Hariyo Ban Program components. It is very important since many rural people in Nepal are highly dependent on forests for their livelihoods and wellbeing. This includes forest resources such as firewood, clean water, building materials, fodder for livestock, and medicinal plants, as well as ecosystem services such as protection from landslides and floods. Many rural poor may hence exert the highest pressures on forests because they have no alternatives. Yet they often have little say in how forests are managed and how the benefits from sustainable forest management are distributed.

Internal governance strengthening builds the capacity of Natural Resource Management (NRM) groups, community organizations, including those in leadership positions, and increase levels of meaningful participation by women and other marginalized groups. This in turn promotes the equitable sharing of resources and other benefits. Internal governance strengthening is achieved through the use of a number of different tools specified in the Community Forestry Development Guidelines of 2009. Hariyo Ban Program uses three such tools as identified in Community Forestry Development Guidelines of 2009. They are:

Tool 1: Public Hearing and Public Auditing (PHPA)
Tool 2: Participatory Well-Being Ranking (PWBR)
Tool 3: Participatory Governance Assessment (PGA)

Participatory Well-Being Ranking is used to identify poor households and individuals so that poverty reduction support can be provided through community forestry initiatives. The guidelines states that 'community forest uses group members generally have different socio-economic status and thus their problems, needs and capacity may be also different. So, it is good to plan activities by identifying the users with differing socio-economic status. For this a participatory well-being ranking should be conducted to identify which households fall under poor, medium and well off categories' (Chapter II, article 2.4, page 6 and 7). In view of this, and based on learning and best practice from the SAGUN program , the Hariyo Ban Program has committed to using the Participatory Well-Being Ranking tool.

What is Participatory Well-Being Ranking?

Participatory Well-Being Ranking is a process by which a group of households are asked to rank themselves according to economic and social status. The process is conducted by Forest Users Groups with the assistance of local resource persons acting as facilitators. Households are generally described as either well-off, middle income, or poor, although some households may be described as extremely poor. Following the ranking exercise, and based on the resources available to the Forest User Group, livelihood support initiatives are identified and implemented to support poor and extremely poor households. This tool directly supports the provision in the Community Forestry Development Guidelines 2009 earmarking 35% of total group funds for pro-poor livelihood support activities.

Why Conduct a Participatory Well-Being Ranking?

Participatory Well-Being Ranking processes are based on the assumption that development initiatives can only be termed sustainable and equitable if both the duty bearers and rights holders internalize and practice the principles of good governance. By categorizing households as being well-off, middle income or poor based on an assessment of financial, natural, physical, human and social assets, the process helps groups to allocate resources to poor

and extremely poor households on a more equitable basis. Poor households get access to group funds which they can use to support a range of income generating activities that help to reduce pressure on forest resources. Increased incomes are likely to improve the capacity of households to adapt in adverse environmental conditions.

The Participatory Well-Being Ranking Process

The process has three main phases:

i) Preparatory Phase

Program staff and facilitators deliver an orientation session on the Participatory Well-Being Ranking process and associated objectives to the User Group's executive committee and members. Executive committee members and facilitators then prepare a list of the names of the heads of all member households. Date, time and venue for the ranking exercise are announced. Other local stakeholders are also invited.

ii) Participatory Well-Being Ranking Phase

Facilitators lead the discussion, ensuring that as much interaction as possible takes place. At least 75% of all member households should participate in the process. Participants choose the criteria they will use to categorize households. Common criteria include:

- Land holdings and other property
- Availability of food grains
- Education level of family members
- Family size

- Income from employment and remittance
- Social status within the community
- Vulnerability to climate hazards

Each household is ranked according to each of the criteria and, on the basis of this information, households are categorized as well-off, middle income, or poor. Extremely poor households are also identified so that special livelihood support initiatives can be designed based on their needs and interests. User Groups are required to allocate 35% of total group funds to extremely poor member households through livelihood improvement plans. Actual amounts will depend on resources available. The livelihood improvement plan should include an analysis of the household's financial, natural, physical, human and social assets, and the desired outcome following plan implementation. Livelihood improvement plans help to diversify the livelihood options available to extremely poor households, and help to reduce long-term vulnerabilities.

iii) Follow-up

The results of Participatory Well-Bring Ranking exercises can be used by Forest User Groups in the preparation and updating of Forest Operational Plans, and User Group constitutions. Regular follow up for action plans developed during the process and for livelihood improvement plans is essential. Information collected during ranking exercises also provides a baseline for the Hariyo Ban Program to assess changes in the livelihoods of poor forest users over a period of time.



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In Natural Resource Management (NRM) groups, different users have different needs and interests. Their access to and control over forest resources also varies depending upon their socio-economic status. In order to ensure equitable benefit sharing and meeting the interests and needs, particularly those of most marginalized groups and women, there is a need to identify users with common needs and interests. NRM groups require sound internal governance to address such issues.

The Community Forestry Development Guidelines of 2009 explain that 'strengthened good governance of the user group helps to improve the transparency and accountability of other service providers'. The guidelines go on to state that 'indicators should be identified to strengthen good governance within the group. Based on these indicators, a good governance strengthening plan should be prepared after discussion at the general assembly. For this, the spider-web diagram can also be used as a plan preparation tool' (Chapter V, article 5.2, pages 17 and 18). In view of this, and based on learning and best practice from the SAGUN program, the Hariyo Ban Program has committed to using the Participatory Governance Assessment tool.

Good Governance in Natural Resource Management

Natural resource management in Nepal is characterized by varying degrees of community involvement. The community forestry sector has made a great deal of progress in this area. Government policy recognizes Forest User Groups as independent and self-governing local organizations. Through user groups, local people are given the opportunity to participate in democratic decision-making processes that yield sustainable results for equitable community forest management. In order for user group members to use this opportunity, it is important that good governance is an integral part of local management practices. Above all, this requires equitable power sharing systems that function in a fair, transparent and participatory manner. With the application of good governance, natural resources can effectively contribute to successful poverty reduction and social inclusion initiatives in local communities.

What is Participatory Governance Assessment?

The Participatory Governance Assessment tool is used to assess good governance practices in community groups. A group of selected

participants evaluates the extent to which the decision making and management practices in a community group comply with the four 'pillars' of good governance: transparency, participation, accountability and predictability. The assessment is guided by a set of sixteen governance indicators which participants rate as very good, good, moderate or poor. Responses are recorded on a matrix and later presented visually as a spider-web diagram. Finally, a Governance Improvement Plan is formulated. In addition to ensuring that monitoring and evaluation processes are participatory, use of this tool can help to improve the overall functioning of a community group and its ability to manage natural resources in an equitable and sustainable manner.

The Participatory Governance Assessment Process i) Preparatory Phase

Program staff and local resource partners initiate preliminary discussions with Community Forest User Groups to identify who will take part in the assessment. A time and date for the assessment meeting are agreed; executive committee members from the user group send out invitations and prepare the necessary documentation. Ideally, at least 75% of user group members should take part. Different categories of forest user should be proportionally represented with a particular focus on women, marginalized groups, and disadvantaged caste and ethnic groups. External stakeholders such as District Forest Officers, Village Development Committee Secretaries, representatives from political parties, and members of other community groups are also invited to

attend the event. Members of user groups in neighbouring localities could also be invited in order to build their capacity to run similar assessments.

ii) The Assessment Phase

The facilitator explains the purpose of the Participatory Governance Assessment and the contents of the matrix. The participants discuss their evaluation of the user group's performance based on the indicators mentioned above. The facilitator records responses on the matrix. Particular note is taken of the views of women, the poor and marginalized, and people from disadvantaged caste and ethnic groups. Final ratings for each indicator should be agreed by consensus. Results are then transferred to a spider-web diagram and displayed for all to see. Participants go on to identify what the group must do in order to improve performance against each indicator. Finally, agreed action is recorded in a Governance Improvement Plan.

iii) Follow Up

Following the assessment, the Community Forest User Group should produce a report and begin discussions about possible areas of governance improvement collaboration with relevant stakeholders. In the coming months, the Executive Committee should monitor implementation of the Governance Improvement Plan and ensure that regular interactions with general members take place to assess progress. A year after the assessment, a formal review is carried out. The review meeting is attended by all user group members.



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